

Video Editing System

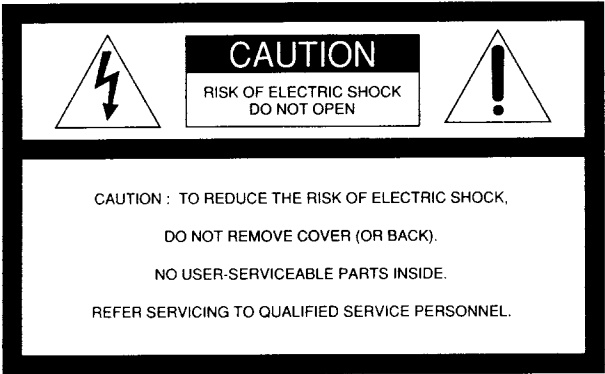
Operating Instructions

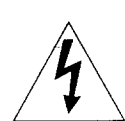
***XV-AL100
XV-AL100E***

Before operating the unit, please read this manual thoroughly and retain it for future reference.

WARNING

To prevent fire or shock hazard, do not expose the unit to rain or moisture.



 This symbol is intended to alert the user to the presence of uninsulated “dangerous voltage” within the product’s enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

 This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

FOR THE CUSTOMERS IN USA

Caution

You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate this equipment.

Note

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FOR THE CUSTOMERS IN USA AND CANADA

CAUTION

TO PREVENT ELECTRIC SHOCK, DO NOT USE THIS POLARIZED AC PLUG WITH AN EXTENSION CORD, RECEPTACLE OR OTHER OUTLET UNLESS THE BLADES CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE.

Notice for the customers in Canada

This apparatus complies with the Class B limits for radio noise emissions set out in Radio Interference Regulations.

Owner’s Record

The model and serial numbers are located at the bottom. Record the serial number in the space provided below. Refer to these numbers whenever you call upon your Sony dealer regarding this product.

Model No. XV-AL100/AL100E Serial No. _____

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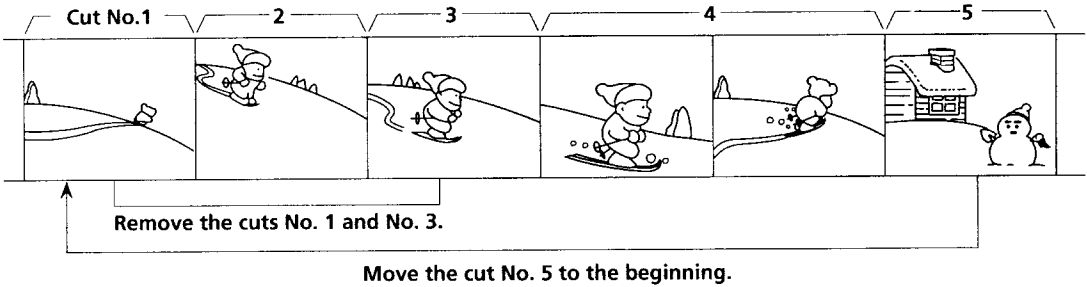
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What you can do with the video editing system

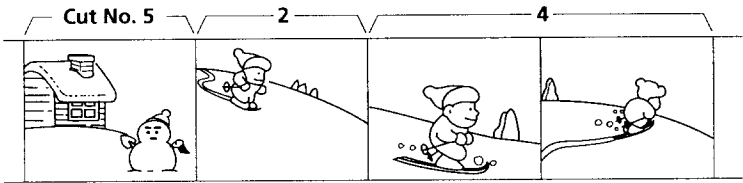
Using a video camera recorder is always enjoyable when you travel or want to record a special event. But when you later play back a tape, do you feel that it is too long and has some unnecessary scenes?

You can edit the tape like this. (See p.32 to edit your video tape like this.)

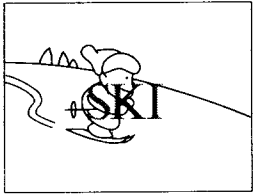
Before editing



After editing



You can also create and superimpose titles for the video images. (See p. 44 to superimpose titles.)

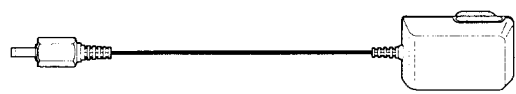


Moreover, you can connect audio equipment or a microphone and add background music or narration to your videotape. (See p. 60 for mixing sound.)

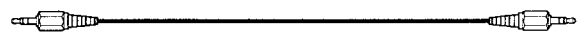
Unpacking

Check that the following accessories are included.

AC power adaptor (1)



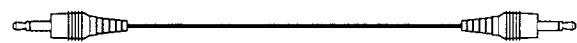
LANC /CONTROL L connecting cables (2)



CONTROL L cable adaptors (2)



Control S connecting cable (1)



A/V connecting cable (1)



S video connecting cable (1)



Usable video equipment

To use the video editing system, you need a player and recorder as specified below. For instructions on connecting the equipment, see from page 8.

Player

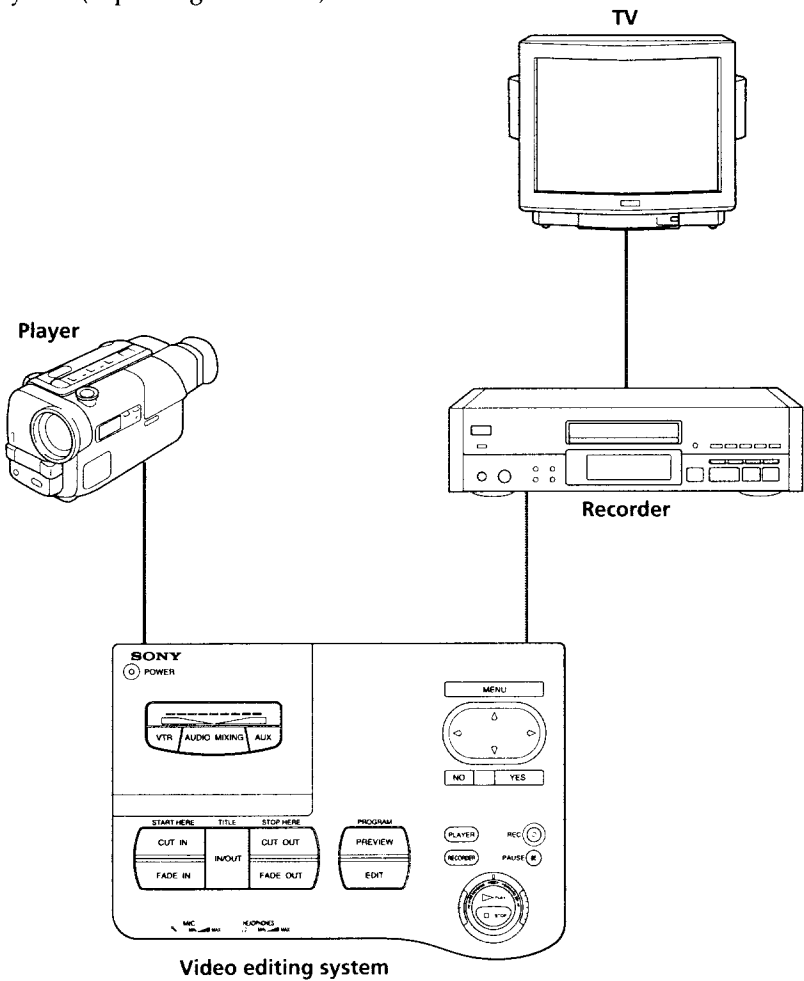
Video cassette player or video camera recorder that has:

- LANC  connector
- CONTROL L or REMOTE connector (Sony's)

Recorder

Video cassette recorder or video camera recorder that has:

- LANC  connector
- CONTROL L or REMOTE connector (Sony's)
- CONTROL S input connector (Sony's)
- Infrared remote control system (depending on models)



Note on LANC mark

 stands for Local Application Control Bus System. The  control jack is used for controlling the tape transport of the video equipment and peripherals connected to it. This jack has the same function as the CONTROL L or REMOTE connectors.

Notes on connection

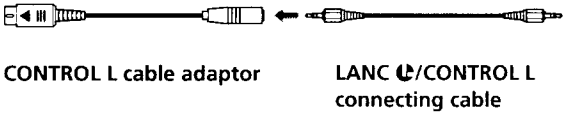
- Be sure to turn off the power of the equipment before connection.
- Be sure to use the equipment with its AC power adaptor connected to a wall outlet. If you use a battery pack and it becomes fully discharged during editing, the editing will stop. In that case, restart the editing from the beginning because the contents recorded up to that point may be erased or recorded incorrectly.
- Connect the red plug to the right audio jack (red) and the white plug to the left audio jack (white).
- When you connect a monaural player to the AUDIO INPUT jacks, connect only the AUDIO-L plug (white). The sound is output from the left and right AUDIO OUTPUT jacks in monaural.
- When connecting a monaural player to the AUDIO OUTPUT jack, use a monaural audio cable.

Notes on the equipment that has the S video jack

- When both the player and the recorder have S video jacks, we recommend using the S video jacks to obtain a high quality picture.
- If you connect to both the S video and video input jacks, the S video signal is selected automatically. To view the video signal, disconnect the S video input jack.
- You may connect the player to the VIDEO INPUT jack and the recorder to the S VIDEO OUTPUT jack. Or, you may connect the player to the S VIDEO INPUT jack and the recorder to the VIDEO OUTPUT jack. The video signal input to the video editing system can be output through both the S VIDEO and VIDEO OUTPUT jacks.

Note on the supplied CONTROL L cable adaptors

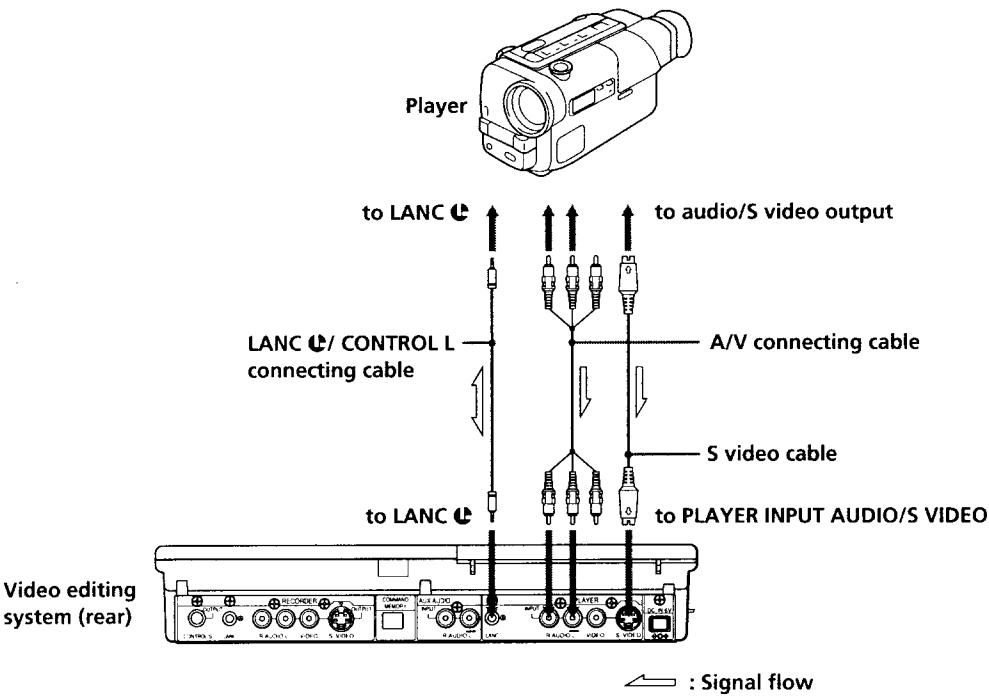
Use the supplied adaptor when the CONTROL L, REMOTE or LANC  connector is the 5-pin () type.



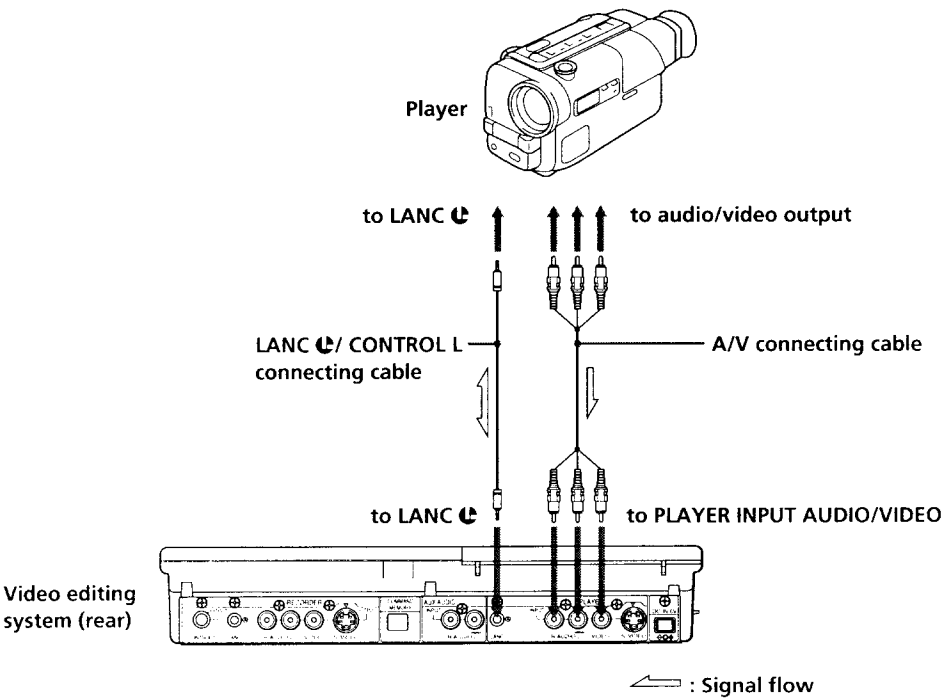
Connecting the video equipment

Connecting the player

Connecting a player with an S video jack



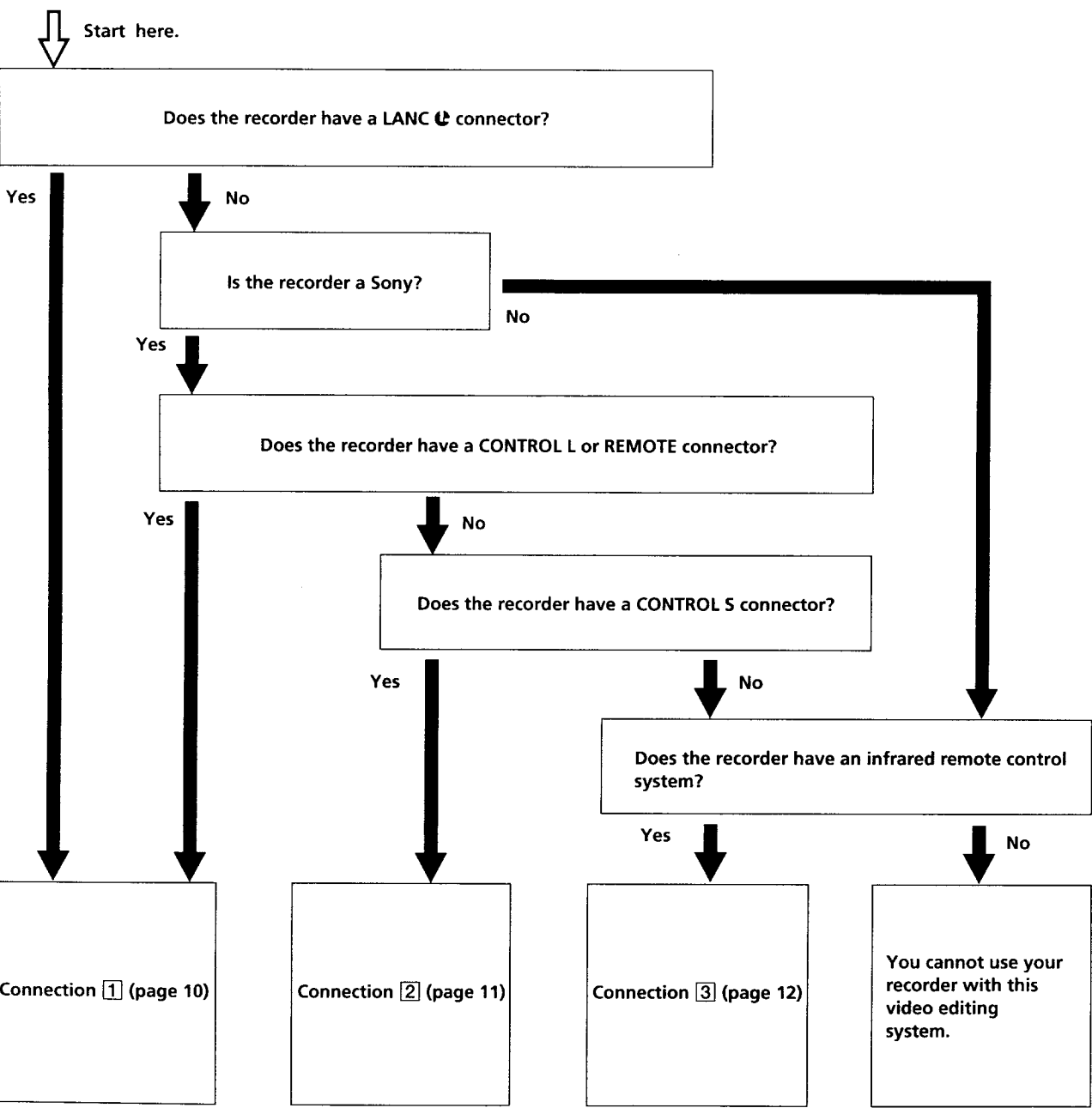
Connecting a player without an S video jack



Connecting the recorder

Which connection to make?

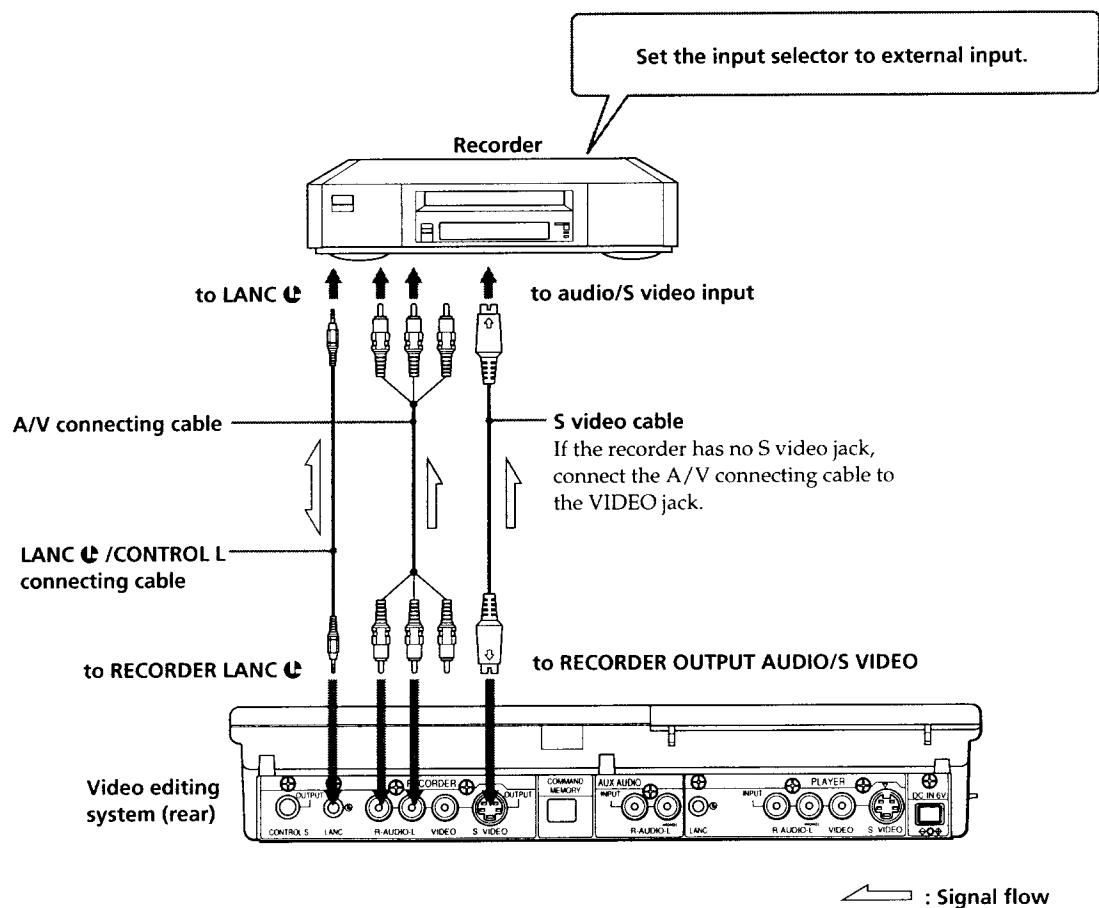
The way to connect the recorder depends on what kind of control jack or system the recorder has. Follow the flowchart below to find the connection for your recorder. After connecting the recorder as described on the corresponding page, set the recorder control system (p.14).



→Connecting the video equipment

Connection 1

- Connect as illustrated below:
- if your recorder has a LANC connector, or
 - if your recorder is a Sony and has a CONTROL L or REMOTE connector.

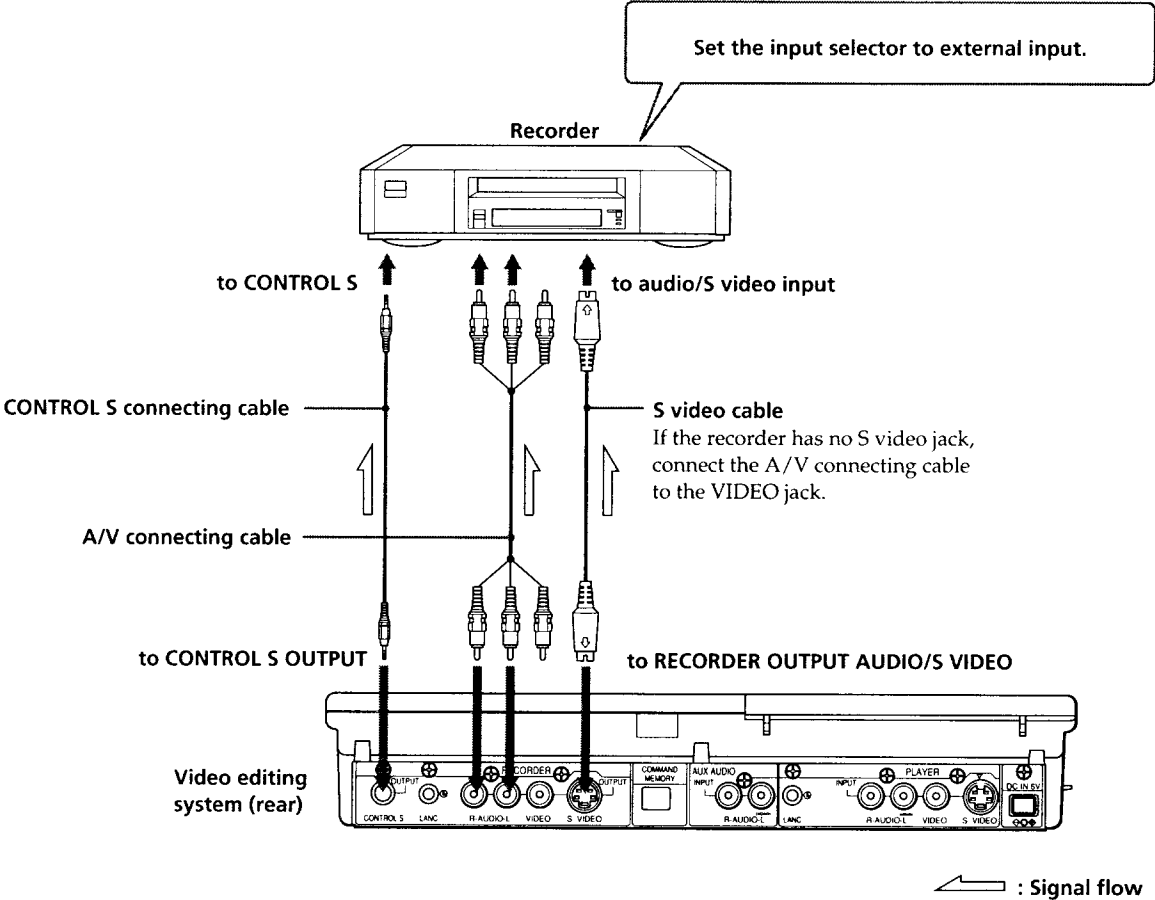


Note

When you have connected the VIDEO jack, do not use the S VIDEO jack. If you do, the video signal cannot be input. If the recorder has no S video jack, connect to the VIDEO jack.

Connection **2**

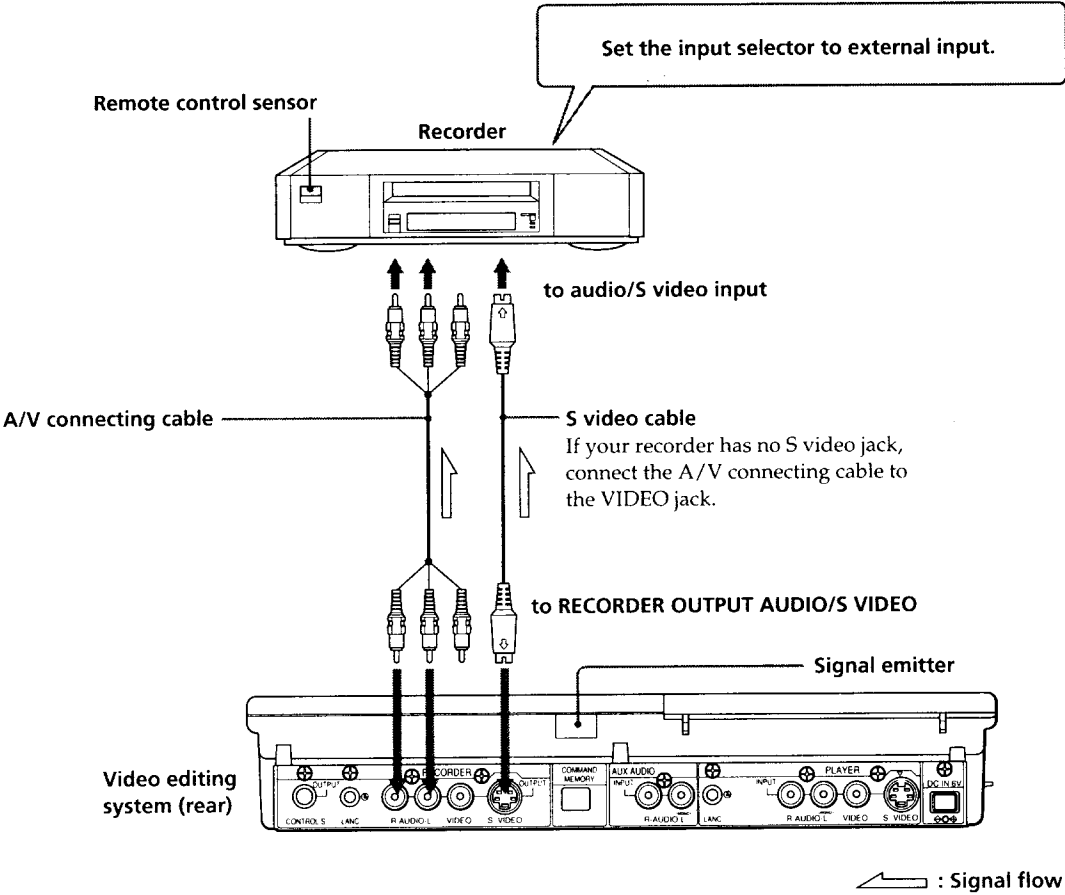
Connect as illustrated below when your recorder is a Sony and has the CONTROL S connector only. After connecting, set the recorder control system (p. 14).



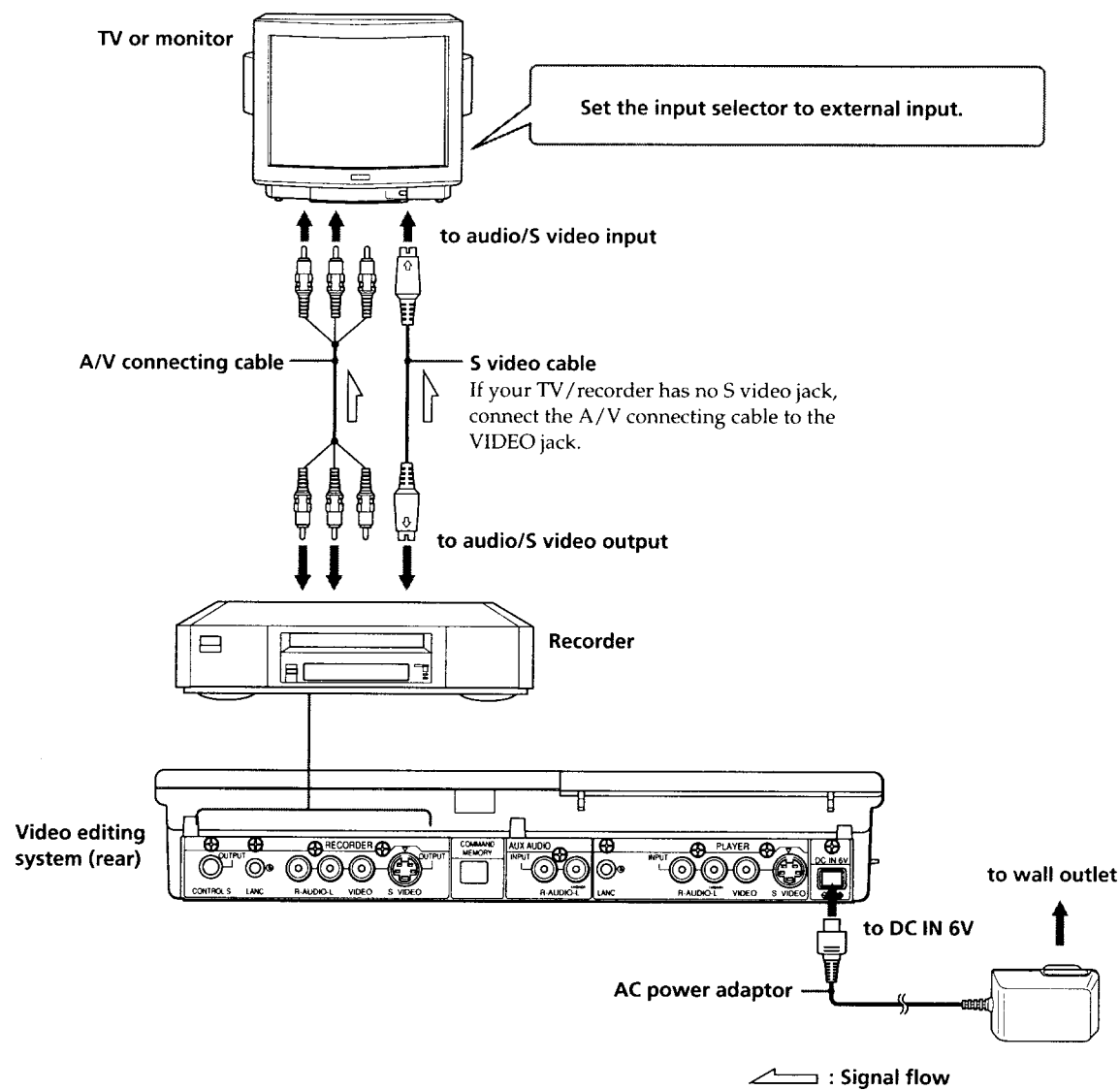
Connection 3

Connect as illustrated below if your recorder can be controlled with an infrared remote commander only.

The signal emitter on the video editing system transmits the infrared signal to the recorder. Place the recorder with its remote control sensor facing toward the video editing system. After connecting, set the recorder control system (p. 14).

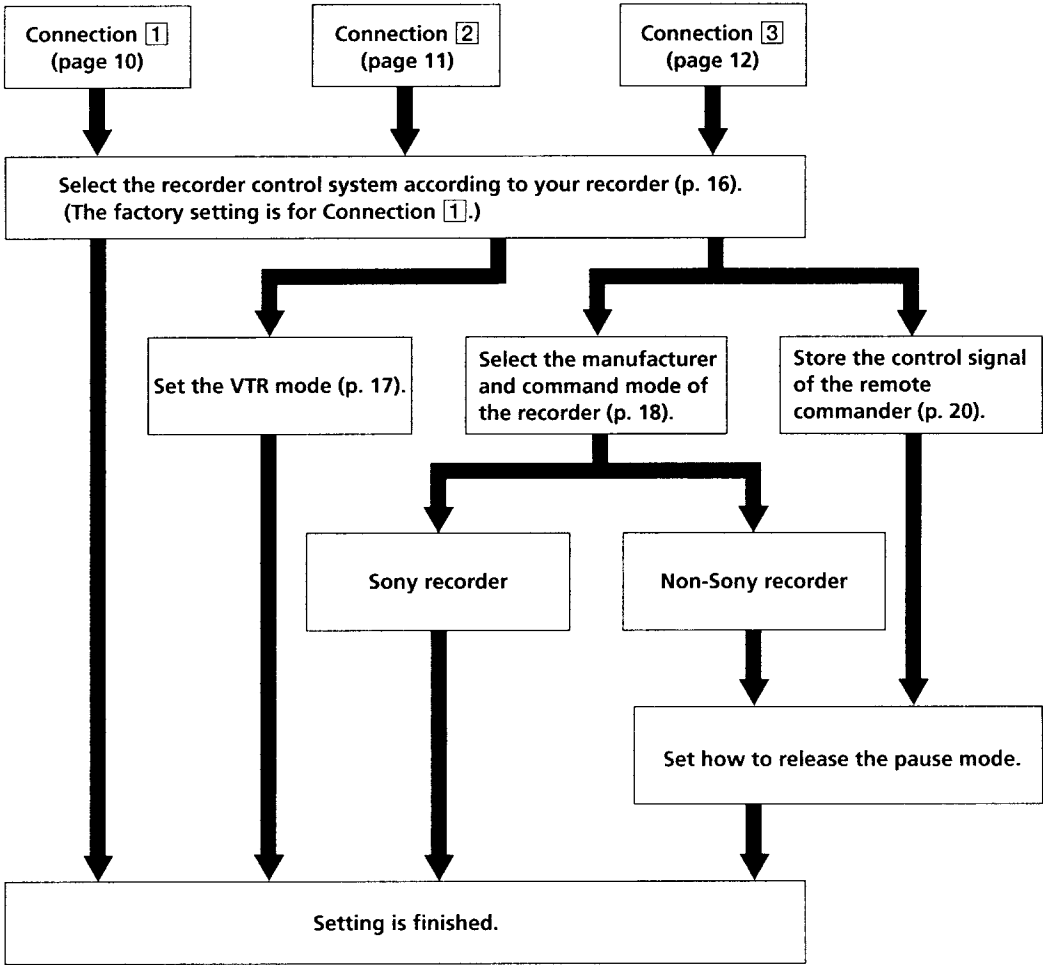


Connecting the TV and power source



Setting the recorder control system

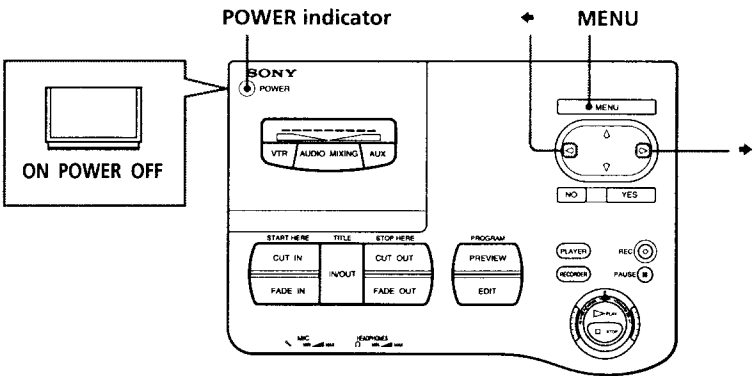
According to the connection of the recorder, set the recorder control system so that you can control the recorder using the video editing system.



Switching the menu language

You can choose English, French, or German for the menu language .

The factory setting is English.

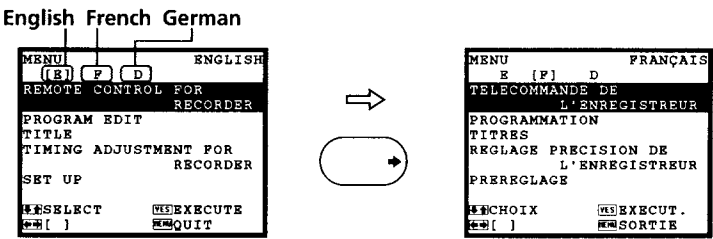


1 Press POWER ON to turn on the power of the video editing system.

The POWER indicator lights up. A demonstration will be repeated to show what you can do with this unit. To end the demonstration, go to step 2.

2 Press MENU to display the main menu.

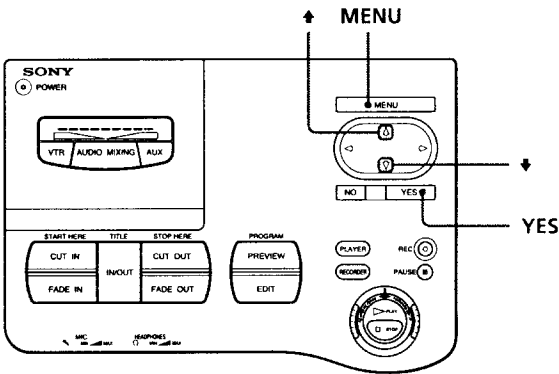
3 Press ←/→ to switch the language.



Selecting the recorder control system

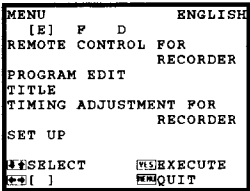
Select the recorder control system according to the connection. The factory setting is LANC . This setting is not necessary for Connection **1**.

Before the operation, turn on the TV or monitor, and set the input selector to external input.

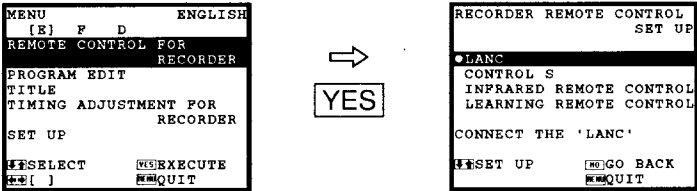


1 Press MENU.

The main menu appears.



2 Press / to select "REMOTE CONTROL FOR RECORDER", and press YES.



3 Move the ● mark to the appropriate item by pressing /.

- Connection **1** — LANC
- Connection **2** — CONTROL S
- Connection **3** and selecting the manufacturer — INFRARED REMOTE CONTROL
- Connection **3** and storing the control signal — LEARNING REMOTE CONTROL

4 Press MENU.

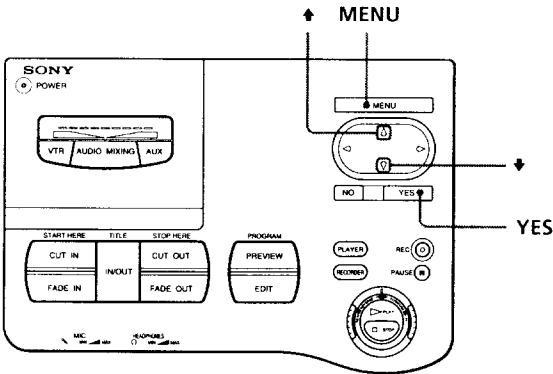
The menu disappears.

Setting the VTR mode

When you have connected the recorder using Connection [2], you must set the VTR mode. The factory setting is the VTR 2 (8 mm).

What is the VTR mode?

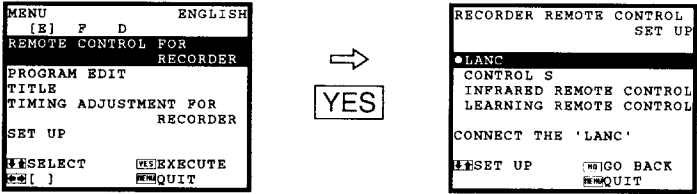
VTR mode refers to the type of remote control signal. To avoid mis-operation of Sony video equipment, there are three different remote control command modes, VTR 1 (Beta or ED Beta format), VTR 2 (8 mm format), and VTR 3 (VHS format). Other manufacturers also have their own command modes.



1 Press MENU.

The main menu appears.

2 Press ↑/↓ to select “REMOTE CONTROL FOR RECORDER”, and press YES.



3 Press ↑/↓ to select “CONTROL S”, and press YES.



4 Press ↑/↓ to move ● to the appropriate command mode, and press YES.

5 Press MENU.

The menu disappears.

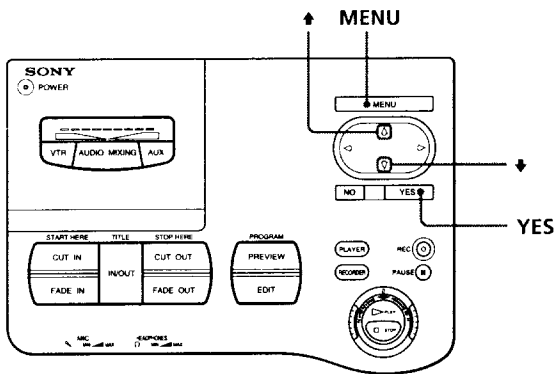
Setting the manufacturer and command mode of the recorder

When you have connected the recorder using Connection [3], you must set the manufacturer and command mode of the recorder. This unit has the command modes of other manufacturers preset*. Select the appropriate command mode in the menu system. If you cannot find the command mode for your recorder, store the control signal as described on page 20.

The factory setting is Sony VTR 2.

Note

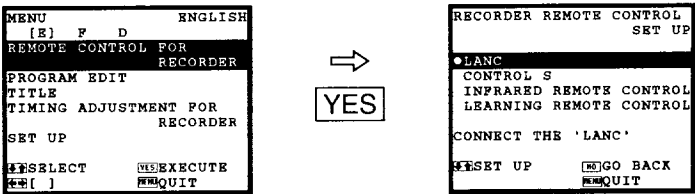
Some buttons may not operate with some manufacturers' recorders.



1 Press MENU.

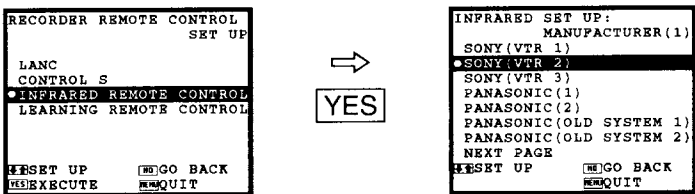
The main menu appears.

2 Press ↑/↓ to select "REMOTE CONTROL FOR RECORDER", and press YES.



3 Press ↑/↓ to move ● to "INFRARED REMOTE CONTROL", and press YES.

The command mode list appears.



***Preset manufacturers (command mode)**

SONY (VTR 1)
SONY (VTR 2)
SONY (VTR 3)
PANASONIC (1)
PANASONIC (2)
PANASONIC (OLD SYSTEM 1)
PANASONIC (OLD SYSTEM 2)

TOSHIBA (1)
TOSHIBA (2)
HITACHI (1)
HITACHI (2)
MITSUBISHI (1)
MITSUBISHI (2)
MITSUBISHI (OLD SYSTEM)
JVC (1)
JVC (2)

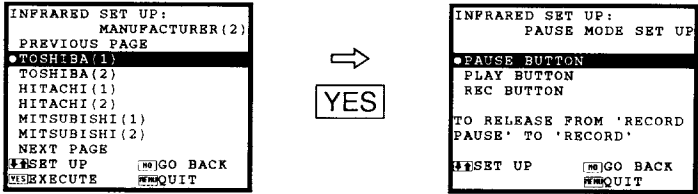
JVC (OLD SYSTEM)
SANYO (1)
SANYO (2)
SHARP (1)
SHARP (2)
SHARP (OLD SYSTEM)
NEC (1)
NEC (2)

4 Press $\uparrow/\downarrow$ to move ● to the command mode of the recorder, and press YES.

When you have selected “SONY (VTR1), (VTR2), or (VTR3)”, you do not have to press YES. Go to step 6.

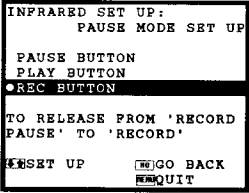
When you have selected non-Sony command mode, the menu of “PAUSE MODE SET UP” appears after pressing YES.

If you are not sure which is the correct mode, select one of them and try operating the recorder.



5 Press $\uparrow/\downarrow$ to move ● to the button you must press to release recording pause mode on the recorder.

This operation is necessary because the button to release recording pause mode differs according to the manufacturer.



6 Press MENU.

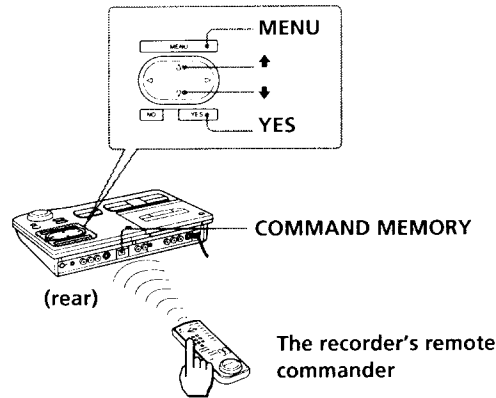
The menu disappears.

After setting, confirm that the recorder operates correctly.

Storing the functions of the remote commander

If you cannot find the command mode for your recorder on the preset command mode list (p. 18), store the control signal in this unit so that you can control the recorder using the unit.

Aim the remote commander at COMMAND MEMORY of the video editing system. Place the remote commander horizontally, 3 to 5 cm (1 3/16 to 2 inches) away from COMMAND MEMORY.



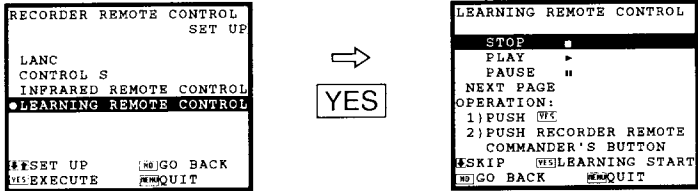
1 Press MENU.

The main menu appears.

2 Press $\uparrow/\downarrow$ to select "REMOTE CONTROL FOR RECORDER", and press YES.

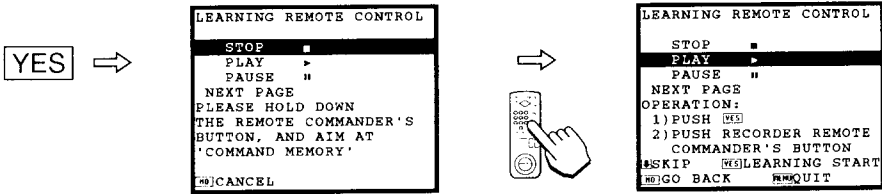


3 Press $\uparrow/\downarrow$ to select "LEARNING REMOTE CONTROL", and press YES.



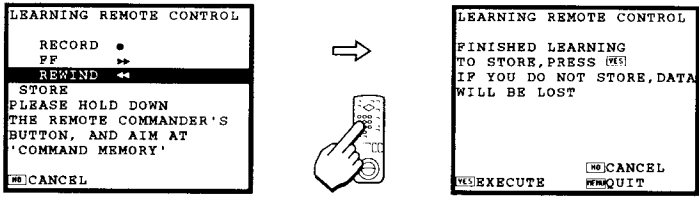
4 As indicated on the screen, press YES again to start the learning process. Then press the ■STOP button of the recorder's remote commander aiming it at COMMAND MEMORY.

The video editing system has learned the ■STOP signal, and "PLAY ►" is automatically selected on the screen.



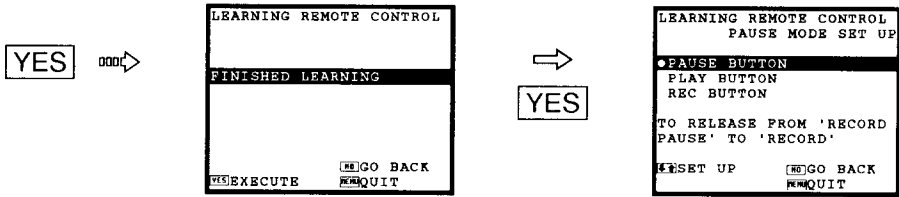
5 Repeat step 4 to store ►PLAY, II PAUSE, ●RECORD, ►►FF (fast forward), and ◀◀REW (rewind) signals.

After the ◀◀REW (rewind) signal is learned, the “FINISHED” message appears.



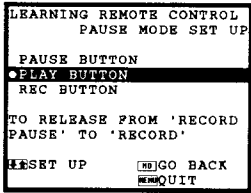
6 Press YES to store the control signals, and press YES again to confirm.

All the control signals learned are stored, and the “PAUSE MODE SET UP” menu appears.



7 Press ▲/▼ to move ● to the button you must press to release recording pause mode on the recorder.

This operation is necessary because the button to release recording pause mode differs according to the manufacturer.



8 Press MENU.

The menu disappears.

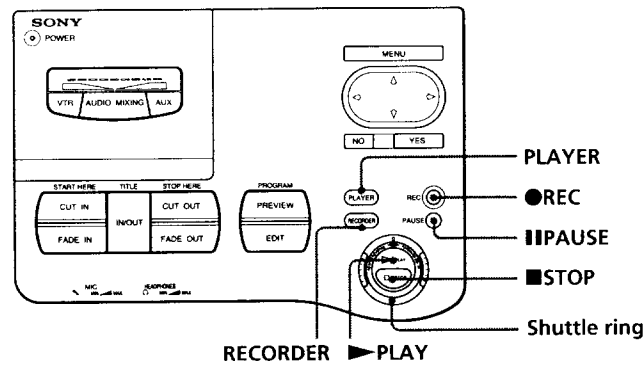
Notes on storing the control signals

- Do not move the video editing system or remote commander.
- You cannot operate the player and recorder using the video editing system while storing the control signal.
- Do not turn off the power until “FINISHED LEARNING” appears (step 6). If you turn off the power of the video editing system, the contents stored up to that point will be erased.
- The video editing system cannot store the control signal of an ultrasonic remote commander or special remote commander.
- The video editing system may not be able to store every key function of some manufacturers.

Checking the controls of the player and recorder

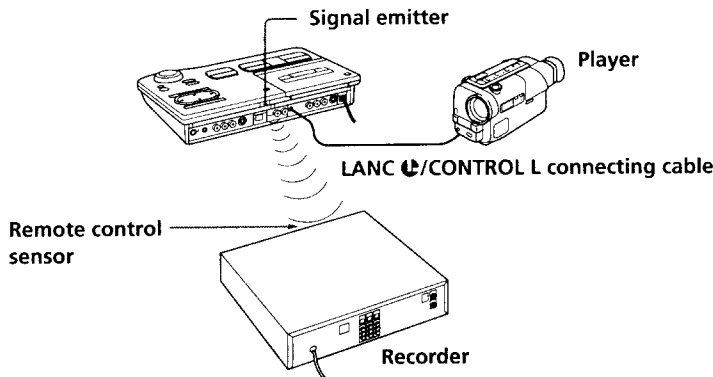
Try to operate the player and recorder with the controls on the video editing system, and make sure that all the settings are correctly made.

If the recorder has a LANC or CONTROL S connector, make sure that the player and recorder are correctly hooked up (pp. 8 - 13).



If the recorder has an infrared remote control system only

Place the recorder with its remote control sensor facing the signal emitter of the video editing system.



Controlling the player with the video editing system

Preparation

- Insert the tape you want to edit.
- Set the input/output selector for the video/audio jack to "output".
- Set the edit switch if available to "on". Picture deterioration will be minimized.
- Set the player's infrared remote commander so that it will not operate the player.
- If you use the RC time code, set the counter mode to time code.
- If the player has a LANC M/S switch or menu setting, set to "S".

Note

If the player has an infrared remote control system, it may receive the recorder control signal which may cause the player to malfunction*. In this case, do one of the following.

- Set the COMMAND MODE switch of the player to another VTR mode position.
- Set the COMMAND MODE switch to "OFF" position.
- If the player does not have a COMMAND MODE switch, cover the remote control sensor.

* To avoid accidentally erasing the tape because of a malfunction of the player, we recommend to set its record-protect tab to the protecting position.

1 Press **PLAYER**.

PLAYER lights up to show that the tape transportation controls on the video editing system are ready for operating the player.

2 Press **▶PLAY**.

The player starts playing back the tape.

Check that all the controls of tape transportation on the video editing system operate the player. To use the shuttle ring, see “Using the shuttle ring”.

If a control does not work, check the settings again.

Controlling the recorder with the video editing system

Preparation

- Insert a tape that can be recorded. (Check that the record-protect tab is not in the protecting position.)
- Set the input selector to external input.
- Set the recording time, volume and so on. (Refer to the operating instructions of the recorder.)
- If the recorder has a LANC M/S switch or menu setting, set to “S”.

1 Press **RECORDER**.

RECORDER lights up to show that the tape transportation controls on the video editing system are ready for operating the recorder.

2 Press **▶PLAY**.

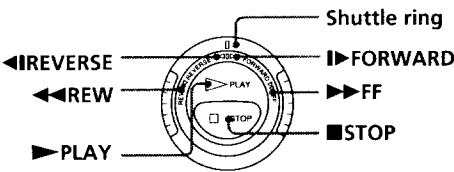
The recorder starts playing back the tape.

Check that all the controls of tape transportation on the video editing system operate the recorder. To use the shuttle ring, see “Using the shuttle ring”.

If a control does not work, set the function again.

Using the shuttle ring

You can use the shuttle ring, the REC, and PAUSE buttons to transport the tape of the equipment that you have selected with the PLAYER or RECORDER button. The button of selected equipment lights up.



The shuttle ring functions as follows when used in infrared remote control mode.

Tape transportation	Operation
Playback	Press ►.
Frame-by-frame playback*	After pressing ► and (play pause), turn the shuttle ring to ► slightly and release it.
Fast forward	Turn the shuttle ring to ►►.
Backward frame-by-frame playback*	After pressing ► and (play pause), turn the shuttle ring to ◀ slightly and release it.
Rewind	Turn the shuttle ring to ◀◀.

- * The shuttle ring does not work for these functions when:
- the recorder is controlled by learning the functions of the remote commander using Connection [3].
 - the non-Sony recorder is controlled with an infrared remote control system using Connection [3].
 - the recorder or the player does not have the frame-by-frame playback function.

Note

The shuttle ring may work incorrectly in the following cases.

- You turned the shuttle ring too quickly.
- The player or recorder is slow to react to signals from the video editing system.
- You unnecessarily kept pressing the button of the recorder’s remote commander to do the picture search (Fixed picture-search function).
- You turned the shuttle ring immediately after turning on the power.

Editing while viewing playback

— Real-time editing

Editing means to make a new tape from a prerecorded tape by deleting unnecessary scenes and allocating the scenes you want in the desired order. To start using the video editing system with simple operations, try to edit while viewing playback (real-time editing).

Real-time editing procedures

The procedure for editing a video tape recorded on your video camera or recorder is as follows:

Procedure 1: Getting ready for real-time editing

Turn on the power and prepare the video equipment for editing.
This section also gives a demonstration of what you can do with the video editing system.

Procedure 2: Making a title with preset titles

Select one of the factory-preset titles and store it in the title list for superimposing.

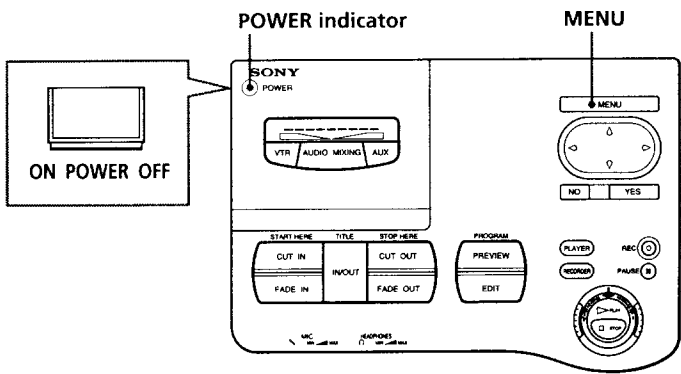
Procedure 3: Superimposing the title while editing

Make a new tape with the title on the picture from your prerecorded videotape.

Procedure 1: Getting ready for real-time editing

Make sure you have connected your player, recorder, TV, and the power source correctly to your video editing system.

Look at the demonstration showing what you can do with the unit.



1 Turn on the power of the video equipment.

2 Press **POWER ON** to turn on the power of the video editing system.

The **POWER** indicator lights up, and the demonstration appears to show what you can do with the video editing system.

To end the demonstration, press **MENU**.

3 In the player, insert the tape you want to edit.

4 In the recorder, insert a tape that can be recorded.

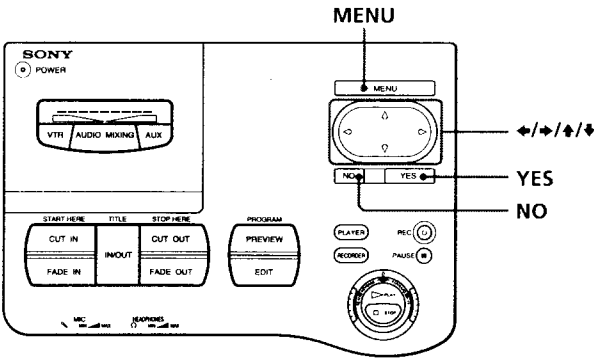
Check that the record-protect tab is not in the protecting position.

To make the demonstration not appear
See "Setting the demonstration mode" (p. 59).

Procedure 2: Making a title with preset titles

This section explains how to make a title by selecting from the factory-preset titles (Super-Titles). To create your own title using the character list, see “Entering characters to make titles” (p. 46).

For example, select “Happy Anniversary” to add at the beginning of your video tape.



1 Press MENU to display the main menu.

2 Press ↕/↔ to select “TITLE”, and press YES.

The title list appears. If you have made some titles, the title numbers and their contents appear. If you have not made any, only the title numbers appear.

If you want to go back to the main menu, press NO.

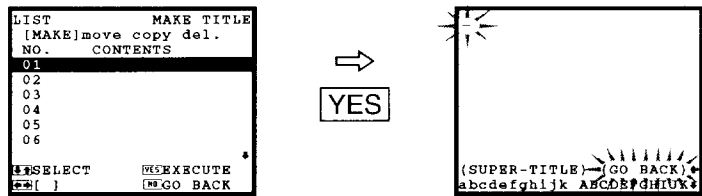


To change the modes on the title list

Press ↕/↔. You can select “move”, “copy”, or “del. (delete)”.

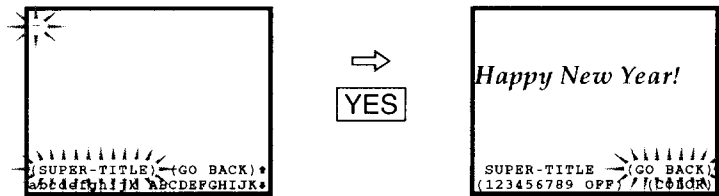
3 Press **↑/↓** to select a title number, and press **YES** to make a title.

A title entry display appears, and the cursor flashes on the initial position.



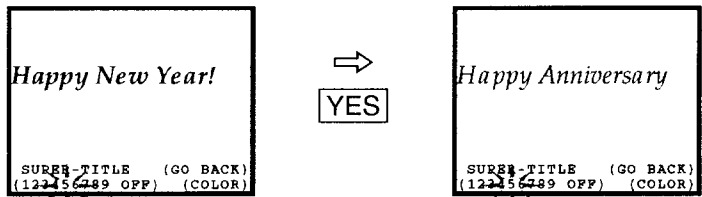
4 Press **↑/↓/←/→** to select "SUPER-TITLE", and press **YES**.

The factory-preset title No. 1 appears.



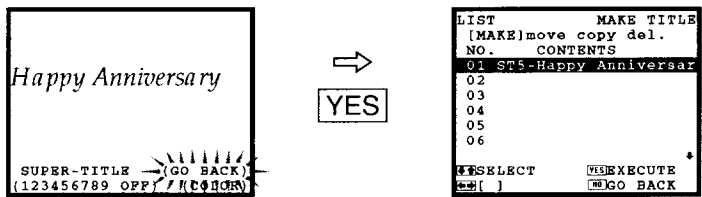
5 Press **↑/↓/←/→** to select the number of the SUPER-TITLE, and press **YES**.

For example, select "5" and press YES. "Happy Anniversary" appears.
If you want to change the color, select "COLOR" on the screen and press YES until you get the title in the desired color.



6 When the title is completed, press **↑/↓/←/→** to select "GO BACK" and press **YES**.

The title is stored in memory, and the title list appears.
To continue making titles, repeat from step 3.



7 Press MENU.

The menu disappears.

To move the title on the screen

Press TITLE IN/OUT to display the title stored, and press **▲/▼/◆/◆**.

Every time you press TITLE IN/OUT, the titles stored in the title list appear and disappear in order from title No. 1 to No. 15.

To end moving the title, press TITLE IN/OUT again.

To create titles by selecting characters

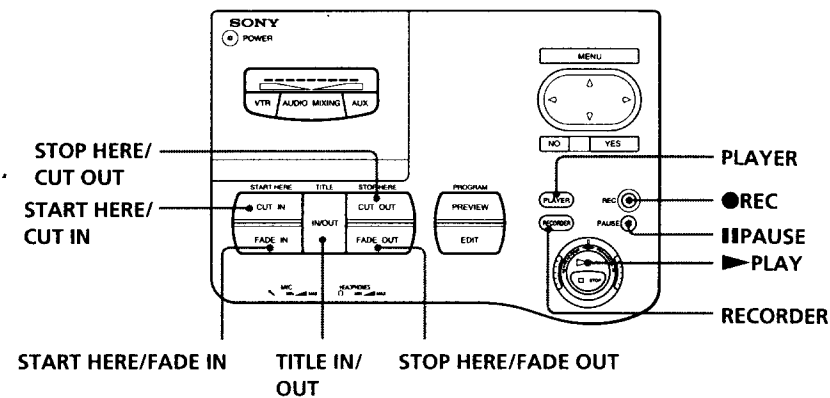
See “Entering characters to make titles” (p. 46).

The preset titles are the followings. You can change the color but cannot change the font and size of the preset titles.

- 1 *Happy New Year!*
- 2 Happy Birthday!
- 3 *Happy Birthday!*
- 4 *Merry Christmas*
- 5 *Happy Anniversary*
- 6 ***Season’s Greetings!***
- 7 SUMMER HOLIDAY!
- 8 THE END
- 9 *Fin*

Procedure 3: Superimposing the title while editing

You can add to the video picture the title you have made. For example, add the title at the beginning of the videotape. Make sure that the menu disappears. If not, press MENU.



1 Press **PLAYER** and **▶PLAY** to locate the start point, and press **⏸PAUSE** to set the player to playback pause mode.

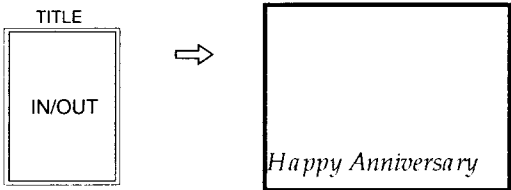
2 Press **RECORDER**, **▶PLAY**, **⏸PAUSE**, and **●REC** to set the recorder to recording standby mode.

When you record from the beginning of the videotape, first press **▶PLAY** and **●REC** to make a blank portion* on the tape. About 10-15 seconds later, press **⏸PAUSE**.

* This blank portion is necessary for a clean editing start because some tapes have noise or a portion that cannot be recorded on at the beginning.

3 Press **TITLE IN/OUT** to display the title to be added at the beginning of the tape.

Every time you press **TITLE IN/OUT**, the titles stored in memory appear and disappear in order from title No. 1 to No. 15. If the selected number has no title stored, a blank screen will appear.



4 Press **START HERE/ FADE IN** to add the title to the tape.

The title is added at the beginning of the tape, and the scene of the start point will gradually appear after the title disappears.

If you want the starting scene to appear the instant the title disappears, press **START HERE/CUT IN** instead of **FADE IN**.

With real-time editing, the opening title does not appear on the video picture.

5 At the end of editing, press **STOP HERE/FADE OUT**.

The ending scene gradually disappears. The player enters playback pause mode and the recorder enters recording pause mode.

If you want the ending scene to disappear instantly, press **STOP HERE/CUT OUT** instead of **FADE OUT**.

When you finished editing

Press **POWER OFF**. The **POWER** indicator goes off.

To superimpose a title partway through the tape

After steps 1 and 2, press **START HERE/ FADE IN** (or **CUT IN**) to start editing. At the point where you want to add the title, press **TITLE IN/OUT**. The title appears and disappears when you press **TITLE IN/OUT** again.

Every time you press **TITLE IN/OUT**, the titles appear and disappear in the order of the title list.

To superimpose the title at the end of the tape

While editing, press **TITLE IN/OUT** at the point where you want the title to be

Editing only the desired scenes automatically in the desired sequence — Program editing

Editing means to make a new tape from a prerecorded tape by deleting unnecessary scenes and allocating the scenes you want in the desired order. With program editing, you can edit your tape automatically by designating scenes to make a program.

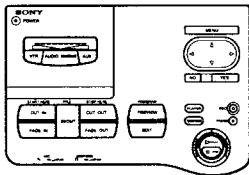
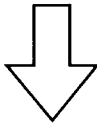
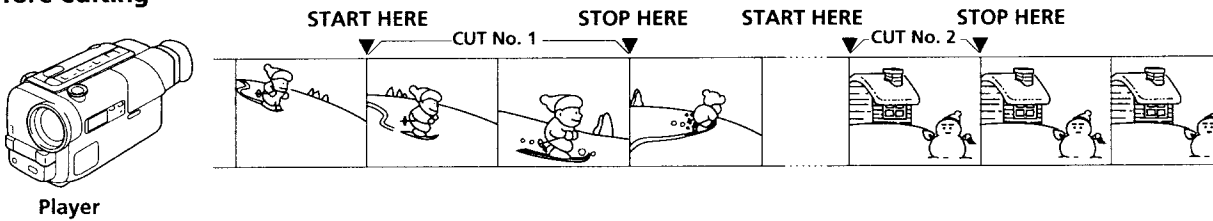
Words used in editing

- Cut — The scene to be allocated for editing
- Preview — To check the program you have made before executing program editing
- Program — A group of cut of desired length and allocation
- Program editing — The automatic editing function of this unit activated by pressing the EDIT button after making the program
- START HERE point — The start point of a cut
- STOP HERE point — The end point of a cut
- Time code (RC time code*) — This function records the frame-by-frame position of the tape as a serial number of hour, minute, second, and frame. As the picture and counter reading are identical, you can locate a scene precisely with the counter.

* Rewritable Consumer time code

For example, you can edit the tape designating the cuts No. 1 and No. 2.

Before editing



Make a program to set START HERE and STOP HERE points for the cuts No. 1 and No. 2. The video editing system automatically makes a new tape designating the cuts.

After program editing

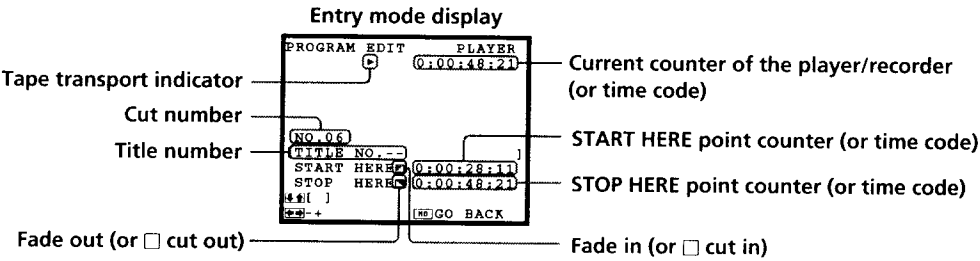


Program editing procedures

- Procedure 1: Getting ready for program editing**
Get the player and recorder ready for editing.
Turn on the power of the video editing system, and display the menu for program editing.
- Procedure 2: Setting the START HERE and STOP HERE points**
Set the START HERE and STOP HERE points of the cuts you want to record on a new tape. If you want to add titles to the cuts, enter the title numbers.
- Procedure 3: Previewing the program**
Preview the program to make sure the cuts are the correct ones.
- Procedure 4: Executing the program editing**
Start editing. The video editing system automatically edits and records the cuts you have designated for the program.

On-screen display while designating the cuts

The entry mode display appears.



To enter the digits, etc.

Pressing **▲/▼** changes the items.
Pressing **◆/◆** changes the digits.

The CUT IN/FADE IN and CUT OUT/FADE OUT

work for both the video picture and title simultaneously.

How many cuts can be designated for a program?

You can designate up to 20 cuts in a program.

If you do not use the RC time code

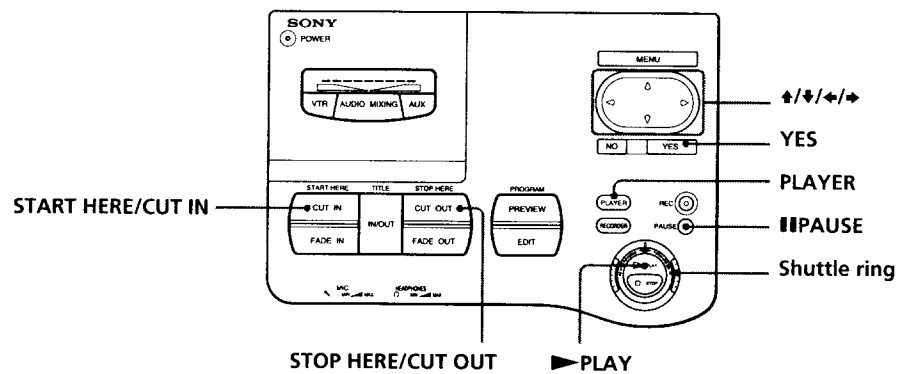
the editing accuracy may deteriorate. In that case, do the following.

- Before you designate the cuts, rewind the tape that you want to edit to the beginning and reset the counter to zero.
- Before executing the program editing, rewind the tape to the beginning and reset the counter to zero.

Notes on time code

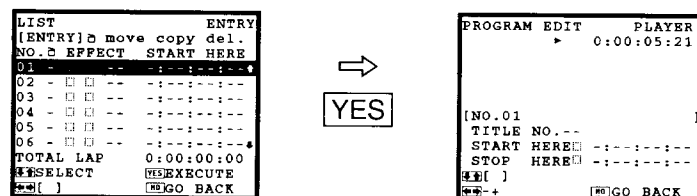
- The RC time code is not compatible with the time code of products for institutional use.
- When editing using the RC time code, the RC time code must be recorded serially from the beginning to the end of the tape to edit correctly. If the RC time code is not recorded serially, the program editing may stop on the way. In that case, record the RC time code from the beginning to the end of the tape again. (The previous time code or data code will be erased.)
- To adjust the lag between the program and edited tape caused by the difference in the start time of the recorder or recording pause mode, see "Editing scenes precisely — Timing adjustment for recorder" (p. 52).

Procedure 2: Setting the START HERE and STOP HERE points



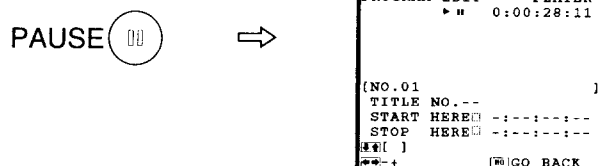
- 1** Press $\leftarrow/\rightarrow$ to move [] to "ENTRY", press $\uparrow/\downarrow$ to select the number of a cut, and press YES.

The entry mode display for the selected cut appears.



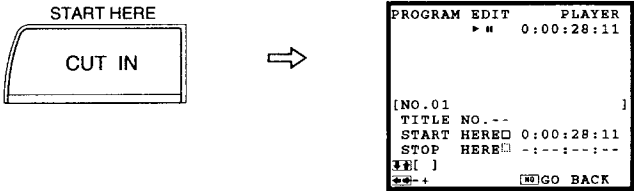
- 2** Press **PLAYER** and use **►PLAY**, the shuttle ring, and **II PAUSE** to locate the **START HERE** point of the cut, and set the player to playback pause mode.

More than 15 seconds of counter reading (about 15 counts for a 4-digit counter) is necessary from the beginning of the tape to the START HERE point.



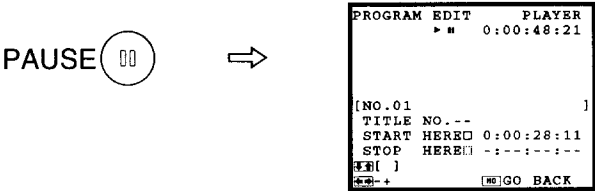
3 Press **START HERE/CUT IN**.

The **START HERE** point of the cut is set.
If you want the cut to fade in, press **START HERE/FADE IN**.



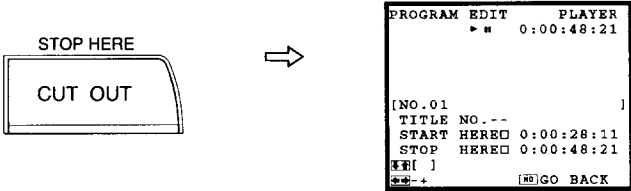
4 Locate the **STOP HERE** point of the cut using ►PLAY, the shuttle ring, and IIPAUSE, and set the player to playback pause mode.

More than 3 seconds of counter reading (about 3 counts for a 4-digit counter) is necessary from the **STOP HERE** point to the end of the tape.



5 Press **STOP HERE/CUT OUT**.

The **STOP HERE** point of the cut is set and stored in the program.
If you want the cut to fade out, press **STOP HERE/FADE OUT**.
In about a second, the entry mode display for the next cut will appear.



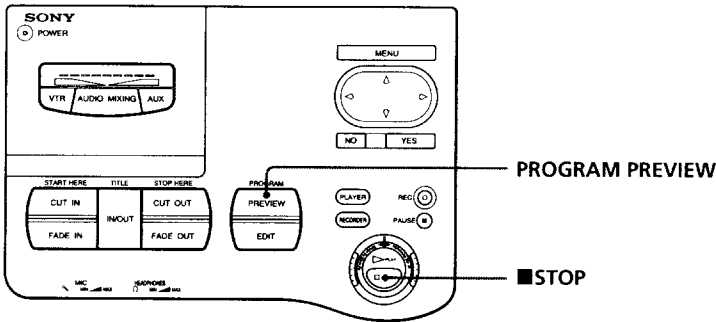
To continue setting the START HERE and STOP HERE points
Repeat steps 1 to 5. Cuts are stored in the program when they are set.

The counter reading you can designate for cuts ranges from -8:59:59 to +8:59:59.
You cannot designate a counter reading out of this range.

Make a cut longer than 2 seconds (2 counts).
The unit cannot edit a cut shorter than 1 second (1 count). If the cut is displayed in white in the edit list, the unit will not edit the cut. If the cut is displayed in red, the unit will edit it; however, as the cut is not long enough, it may be recorded incorrectly. A cut longer than 2 seconds (2 counts) is displayed in blue, and the unit will edit it correctly.

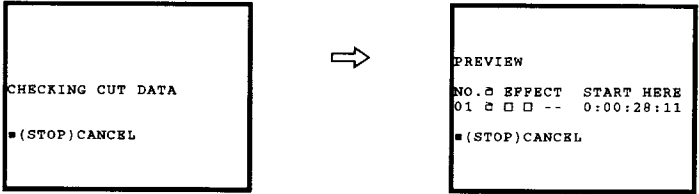
Procedure 3: Previewing the program

After you have designated the cuts, preview the program to check that the cuts are the correct ones.



1 Press PROGRAM PREVIEW.

The PREVIEW button lights up.
"CHECKING CUT DATA" appears, and the program is played back.



2 When previewing is finished, the PREVIEW button goes out and the player stops.

To stop previewing the program

Press **STOP**. The player stops.

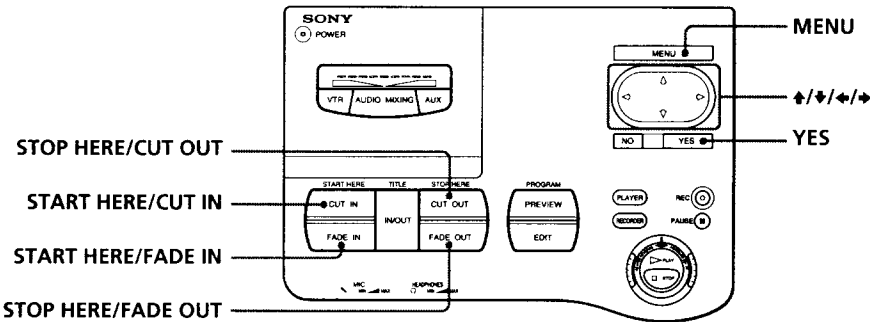
To check the total time

After previewing the program, select "PROGRAM EDIT" and display the edit list. You can see the total time at the bottom of the list.

Revising the program

You can change the START HERE and STOP HERE points of the designated cuts or change the order of cuts. You can also copy or delete cuts.

Changing the START HERE and STOP HERE points

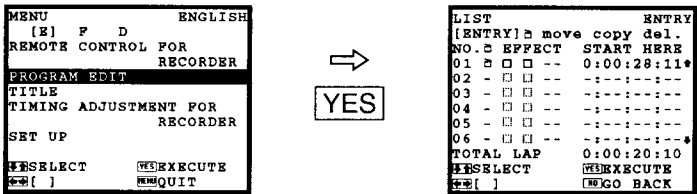


1 Press MENU.

The main menu appears.

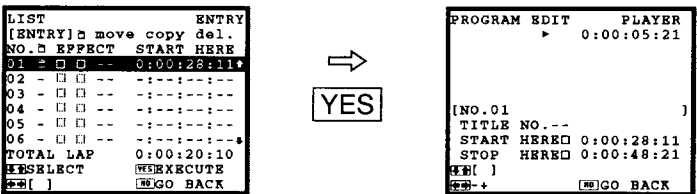
2 Press Left Arrow/Right Arrow to select "PROGRAM EDIT" and press YES.

Edit list appears.



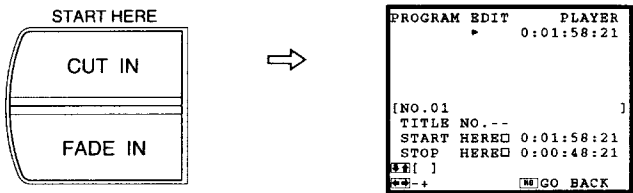
3 Press Left Arrow/Right Arrow on the edit list to select "ENTRY", press Left Arrow/Right Arrow to select the cut number you want to change, and press YES.

The current scene of the cut and the entry mode display appear on the screen.



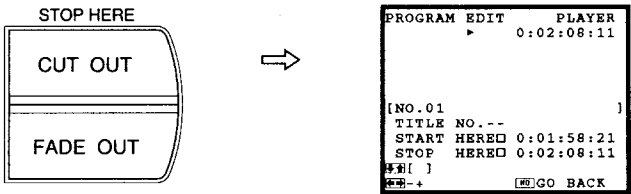
4 Locate the new **START HERE** point using ►PLAY and the shuttle ring, and press **START HERE/CUT IN (or FADE IN)**.

The counter reading of the **START HERE** point is revised.



5 Locate the new **STOP HERE** point using ►PLAY and the shuttle ring, and press **STOP HERE/CUT OUT (or FADE OUT)**.

The counter reading of the **STOP HERE** point is revised.



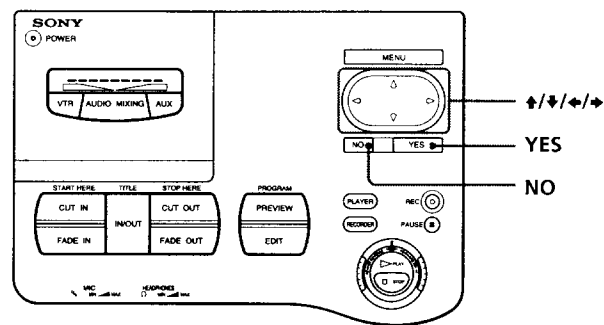
To adjust the **START HERE and **STOP HERE** points without playback**

Change the counter reading of the **START HERE** and **STOP HERE** points on the entry mode display.
After step 3, select the item you want to change by pressing ▲/▼, and press ◀ to decrease or ▶ to increase the digits.
To adjust the points for other cuts, select the cut number and press ◀/▶. The entry mode display for the selected cut number will appear.

To revise **CUT IN/FADE IN and **CUT OUT/FADE OUT****

On the entry mode display, press ▲/▼ to select the **START HERE** or **STOP HERE** data, and press YES to select ☐ (cut in), ☒ (fade in), ☐ (cut out), or ☒ (fade out). Each time you press YES, the marks change.

Moving/copying/deleting a cut



Moving a cut

1 Press $\leftarrow/\rightarrow$ to select "MOVE" on the edit list.

LIST	MOVE
entry a[MOVE]copy del.	
NO. EFFECT START HERE	
01 00:28:11	
02 00:48:08	
03 01:18:05	
04 01:28:05	
05 01:52:01	
06 02:25:10	
TOTAL LAP	02:25:10:12
RESELECT	REEXECUTE
GO BACK	

2 Press $\uparrow/\downarrow$ to select the cut you want to move, and press YES.

LIST	MOVING
entry a[MOVE]copy del.	
NO. EFFECT START HERE	
01 00:28:11	
02 00:48:08	
03 01:18:05	
04 01:28:05	
05 01:52:01	
06 02:25:10	
TOTAL LAP	02:25:10:12
RESELECT	REEXECUTE
GO BACK	

3 Press $\uparrow/\downarrow$ to select the new position, and press YES.

The cut is inserted at that position.

LIST	MOVING
entry a[MOVE]copy del.	
NO. EFFECT START HERE	
01 00:48:08	
02 00:28:11	
03 01:18:05	
04 01:28:05	
05 01:52:01	
06 02:25:10	
TOTAL LAP	02:25:10:12
RESELECT	REEXECUTE
GO BACK	

To stop moving cuts

Press NO to go back to the main menu.

Copying a cut

1 Press **↔** to select "COPY" on the edit list.

LIST				COPY
entry	▢	move	[COPY]	del.
NO.	▢	EFFECT	START	HERE
01	▢	▢	01	0:00:48:08*
02	▢	▢	--	0:00:28:11
03	▢	▢	05	0:01:18:05
04	▢	▢	06	0:11:28:05
05	▢	▢	--	0:15:29:01
06	-	▢	--	--:--:--:--*
TOTAL LAP				0:25:10:12
[[SELECT				[[EXECUTE
[[[]				[[GO BACK

2 Press **↕** to select the cut you want to copy, and press YES.

A copy of the cut is placed just after the original cut.

LIST				COPY
entry	▢	move	[COPY]	del.
NO.	▢	EFFECT	START	HERE
01	▢	▢	01	0:00:48:08*
02	▢	▢	--	0:00:28:11
03	▢	▢	05	0:01:18:05
04	▢	▢	06	0:11:28:05
05	▢	▢	--	0:15:29:01
06	-	▢	--	--:--:--:--*
TOTAL LAP				0:25:10:12
[[SELECT				[[EXECUTE
[[[]				[[GO BACK

→
YES

LIST				COPY
entry	▢	move	[COPY]	del.
NO.	▢	EFFECT	START	HERE
01	▢	▢	01	0:00:48:08*
02	▢	▢	01	0:00:48:08
03	▢	▢	--	0:00:28:11
04	▢	▢	05	0:01:18:05
05	▢	▢	06	0:11:28:05
06	▢	▢	--	0:15:29:01*
TOTAL LAP				0:25:30:22
[[SELECT				[[EXECUTE
[[[]				[[GO BACK

To insert the same cut at another position

First copy the cut and then move the copy of the cut to the desired position.

To stop copying cuts

Press NO to go back to the main menu.

Notes

- If you have already entered 20 cuts, you cannot copy the cut.
- If you have entered a cut in No. 20, you cannot copy the cut. Move or delete the cut No. 20.

Deleting the cut

1 Press **↔** to select "DEL" on the edit list.

LIST	DELETE
entry 3 move copy[DEL.]	
NO.5 EFFECT START HERE	
01 0 0 01 0:00:48:08*	
02 0 0 01 0:00:48:08	
03 0 0 -- 0:00:29:11	
04 0 0 05 0:01:18:05	
05 0 0 06 0:11:28:05	
06 0 0 -- 0:15:29:01*	
TOTAL LAP 0:25:30:22	
YES EXECUTE	NO GO BACK

2 Press **↑/↓** to select the cut you want to delete, and press **YES**.

The message to confirm that the cut should be deleted appears.

LIST	DELETE
entry 3 move copy[DEL.]	
NO.5 EFFECT START HERE	
01 0 0 01 0:00:48:08*	
02 0 0 01 0:00:48:08*	
03 0 0 -- 0:00:28:11	
04 0 0 05 0:01:18:05	
05 0 0 06 0:11:28:05	
06 0 0 -- 0:15:29:01*	
TOTAL LAP 0:25:30:22	
YES EXECUTE	NO GO BACK

→
YES

DELETE ?
NO.5 EFFECT START HERE
02 0 0 01 0:00:48:08
YES EXECUTE
NO CANCEL

3 Press **YES** to delete the cut.

The cut is deleted, and the other cuts are renumbered. If you want to cancel deleting the cut, press NO instead of YES.

YES →

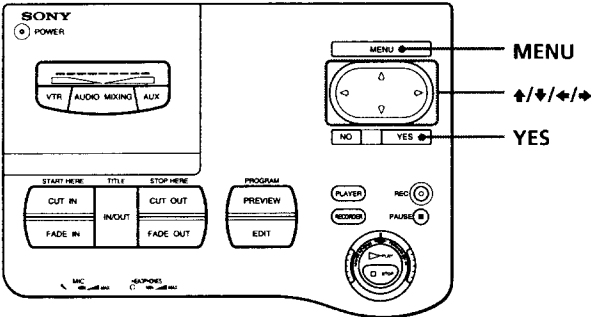
LIST	DELETE
entry 3 move copy[DEL.]	
NO.5 EFFECT START HERE	
01 0 0 01 0:00:48:08*	
02 0 0 -- 0:00:28:11	
03 0 0 05 0:01:18:05	
04 0 0 06 0:11:28:05	
05 0 0 -- 0:15:29:01	
06 - 0 -- -:-:-:-	
TOTAL LAP 0:25:20:12	
YES EXECUTE	NO GO BACK

To stop deleting cuts

Press NO to go back to the main menu.

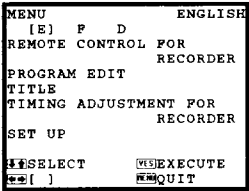
Making titles

You can make and superimpose up to 15 titles by storing them in the title list.



1 Press MENU.

The main menu appears.



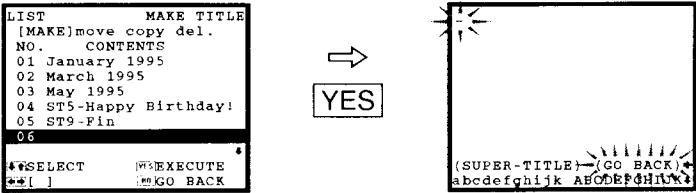
2 Press ↕ to select “TITLE”, and press YES.

The title list appears. If you have made some titles, the title numbers and their contents appear. If you have not made any, only the title numbers appear.



3 Press ↕ to select a title number, and press YES.

A title entry display appears, and the cursor flashes on the initial position.



4 Enter characters.

See the next page for details.

5 When the title is completed, select “GO BACK” and press YES.

The title is stored in memory and the title list appears.

To make other titles

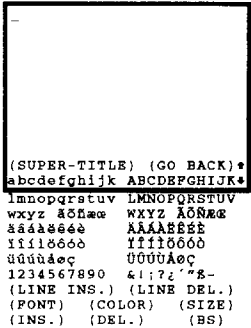
Repeat steps 3 to 5. Select a different title number in step 3. You can make and store up to 15 titles.

Entering characters to make titles

This section explains how to create titles with characters selected from the character list on the screen. To select factory preset titles, see “Making a title with preset titles” (p. 27).

1 Press **▲/▼** to select a line of characters, and press **◀/▶** to select a character.

The screen displays two lines at a time of the following character lines.
You can select any line with **▲/▼** and any character with **◀/▶**.
To enter a blank space, select a space (the place no character is indicated) in a character line.



2 When the character flashes, press YES to enter it on the title entry display.

Erasing a character you have entered

Select “BS (back space)” and press YES.

Inserting a character

Move the cursor to where you want to insert it. Select “INS” and press YES to insert a blank space. Then enter the character in the space.

Deleting a character

Move the cursor to the character you want to delete. Select “DEL” and press YES.

Inserting a line

Move the cursor to the line you want to insert a line, select “LINE INS” and press YES.

Deleting a line

Move the cursor to the line you want to delete, select “LINE DEL” and press YES.

Moving the cursor on the title entry display

Press NO to switch to the moving cursor mode. You can move the cursor to the desired position on the screen with **▲/▼/◀/▶**. To switch back to the enter mode, press NO again.

Changing the font

Place the cursor on the desired line, select "FONT", and press YES. Three fonts are available. Each time you press YES, the font of the line changes.

Changing the color

Place the cursor on the desired line, select "COLOR", and press YES. Eight colors are available. Each time you press YES, the color of the line changes.

Changing the size

Place the cursor on the desired line, select "SIZE", and press YES. Two sizes are available. Each time you press YES, the size of the line changes. When you select the large size, you can enter only 12 characters per line and 6 lines per screen.

You can enter up to 24 characters per line and up to 12 lines per screen.

The first portion of the title (about 18 characters) are displayed on the title list.

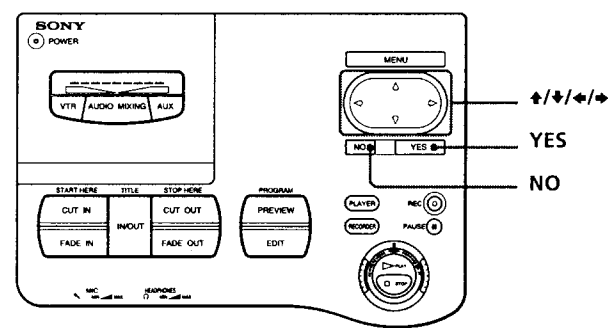
Notes

- If there is a character at the 24th character position, you cannot insert another character on that line.
- If there is a line at the 12th line position, you cannot insert another line on the screen.
- You can select only one kind of font, color, or size per line.

Revising the title list

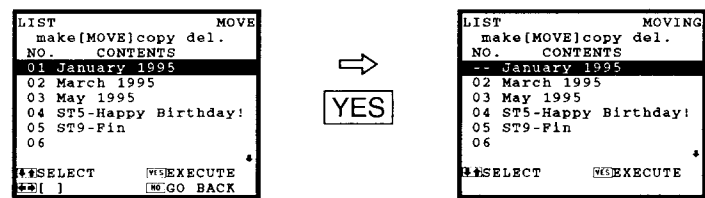
You can change the order of the title list, and copy or delete the titles.

Changing the order of the title list



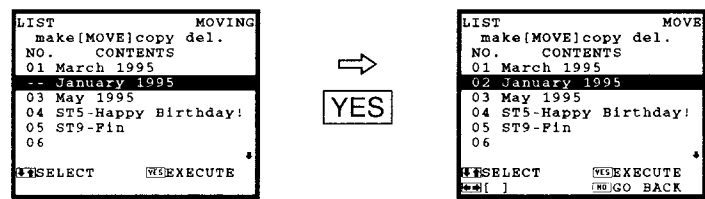
1 Press **↔** to select "MOVE" on the title list.

2 Press **↑/↓** to select the title you want to move and press YES.



3 Press **↑/↓** to move the title to the desired position, and press YES.

The title is placed at the position, and other titles are renumbered.

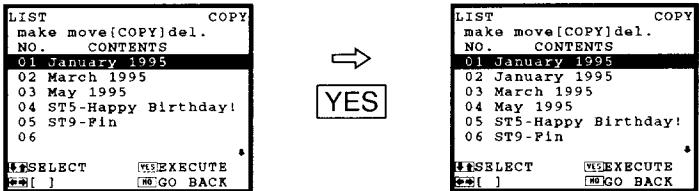


Copying the title

1 Press **←/→** to select “COPY” on the title list.

2 Press **↑/↓** to select the title you want to copy and press YES.

A copy of the title is placed just after the original title.



Notes

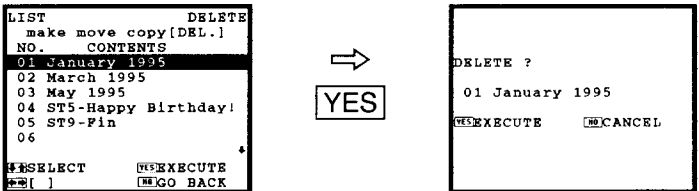
- If you have already entered 15 titles, you cannot copy the title.
- If you have entered a title in No. 15, you cannot copy the title. Move or delete the title No. 15.

Deleting the title

1 Press **←/→** to select “DEL” on the title list.

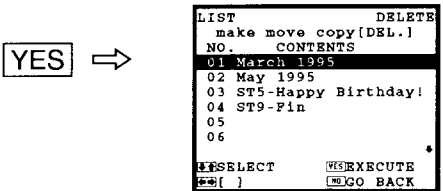
2 Press **↑/↓** to select the title you want to delete, and press YES.

The message to confirm that the title should be deleted appears.



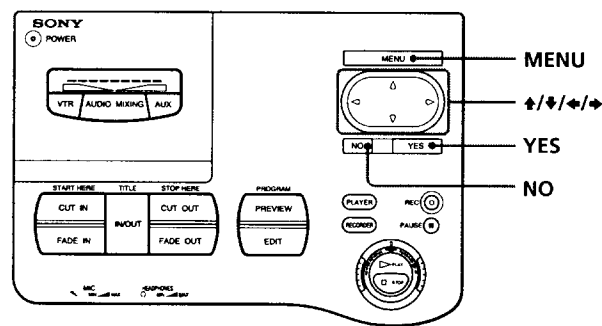
3 Press YES to delete the title.

The title is deleted, and other titles are renumbered. If you want to cancel deleting the title, press NO instead of YES.



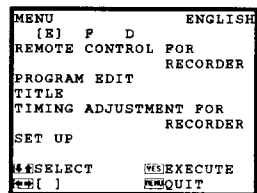
Superimposing the titles

You can superimpose the titles by entering the title data in the entry mode display.



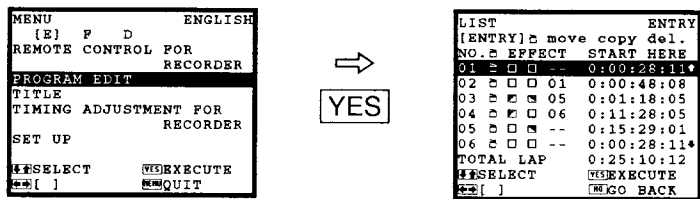
1 Press MENU.

The main menu appears.



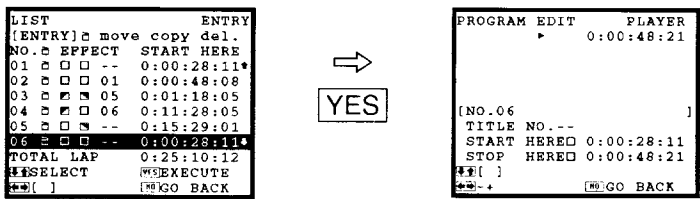
2 Press $\uparrow/\downarrow$ to select "PROGRAM EDIT", and press YES.

The edit list appears.

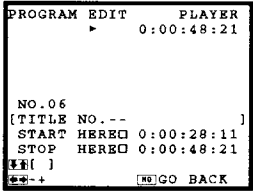


3 Press $\leftarrow/\rightarrow$ to select "ENTRY", press $\uparrow/\downarrow$ to select a cut number, and press YES.

The entry mode display appears.

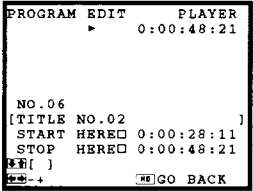


4 Press **↑/↓** to select “TITLE NO.--”.



5 Press **←/→** to enter the title number.

Pressing **→** increases and pressing **←** decreases the digits.



To stop entering title number
Press NO to go back to the edit list.

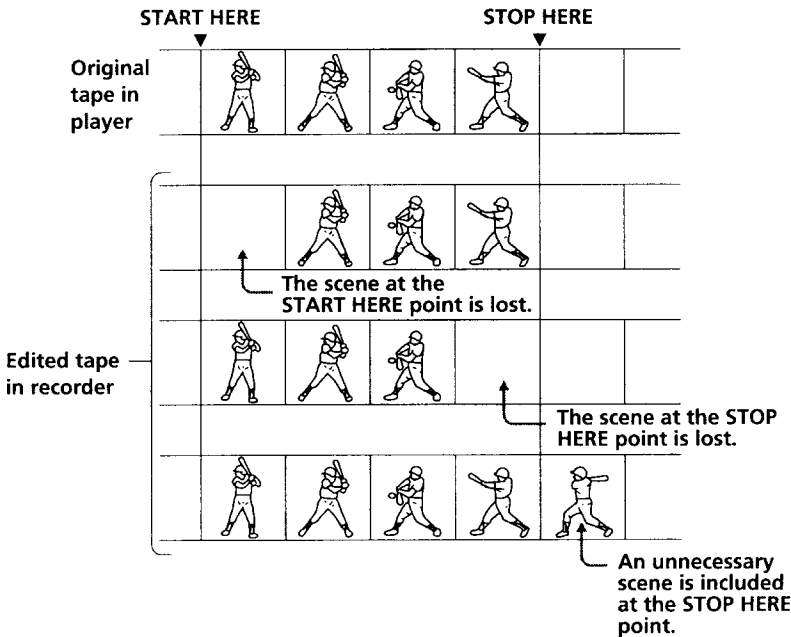
To enter title data for other cuts
Repeat steps 3 to 5.

To revise CUT IN/FADE IN and CUT OUT/FADE OUT
On the entry mode display, press **↑/↓** to select the START HERE or STOP HERE data and press YES. You can select ☒ (fade in) or ☐ (cut in) for START HERE data, and ☒ (fade out) or ☐ (cut out) for the STOP HERE data. Each time you press YES, the marks change.
The CUT IN/FADE IN and CUT OUT/FADE OUT work for both the video picture and title simultaneously.

To superimpose titles directly
Enter the title number while designating cuts.
You can also superimpose titles while viewing playback (Real-time editing, p. 25).

Editing scenes precisely — Timing adjustment for recorder

When you play back a tape edited with program editing, the START HERE point and/or the STOP HERE point may not be the scene you had designated. Some scenes may not appear or some unnecessary scenes may be included. There are several possible causes for such discrepancies: some recorders are late to start recording, or some recorders rewind the tape at the end of recording. Timing adjustment compensates for the lag caused by the above characteristics of the recorder so that the cuts are more accurately recorded as you designated.



Why the beginning of a cut is lost

For the program editing operations, this unit transmits a control signal to the player to play back from about 15 seconds before the START HERE point and to the recorder to release the recording pause mode at the START HERE point. Some recorders, however, require several seconds before starting recording after the recording pause mode is released. This is why the beginning of the cut is lost.

Why the end of a cut is lost, or an unnecessary scene is included at the end of a cut

For the program editing operations, this unit transmits a control signal to the player to play back until about 2 seconds after the STOP HERE point and to the recorder to enter the recording pause or stop mode at the STOP HERE point. Some recorders, however, require several seconds before entering recording pause or stop mode after recording. Or, when starting the next recording, some recorders rewind the tape a little and then enter recording pause or stop mode. This is why the end of the cut is lost, or an unnecessary scene is included at the end of the cut.

Once the timing adjustment has been done, this unit will automatically compensate for the characteristics of the recorder to ensure that the START HERE and STOP HERE points are recorded accurately. This unit can compensate for the lag:

START HERE point

- NTSC system — up to 5 seconds by $\frac{1}{30}$ second (1 frame*)
- PAL system — up to 5 seconds by $\frac{1}{25}$ second (1 frame*)

STOP HERE point

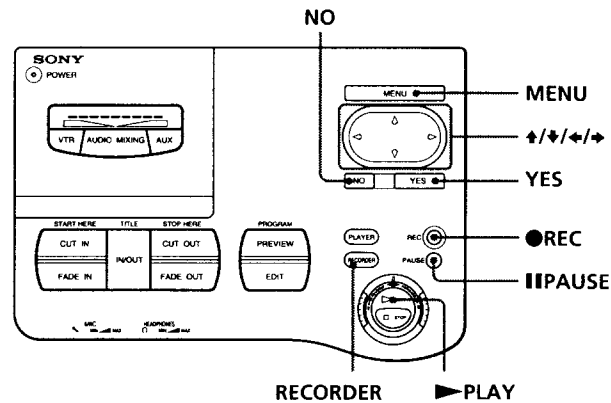
- NTSC system — from -1 second to +4 seconds by $\frac{1}{30}$ second
- PAL system — from -1 second to +4 seconds by $\frac{1}{25}$ second

*Frame

One frame equals one image. The number of frames displayed in one second differs depending upon the TV system.

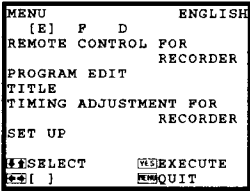
- NTSC system — about 30 frames per second
- PAL system — about 25 frames per second

Measuring the lag

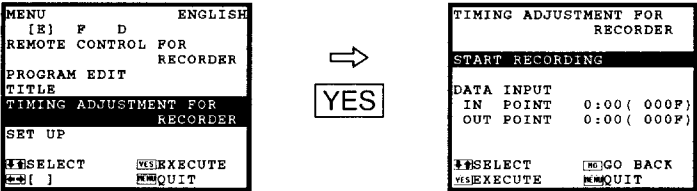


1 Insert a blank tape in the recorder and rewind it to the beginning.

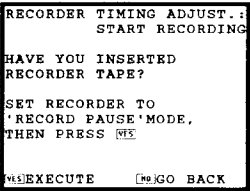
2 Press **MENU**.
The main menu appears.



3 Press **↑/↓** to select “TIMING ADJUSTMENT FOR RECORDER”, and press **YES**.



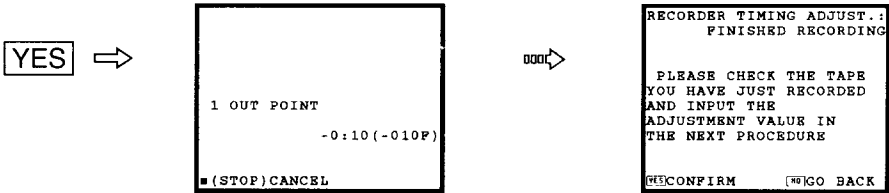
4 Press **↑/↓** to select “START RECORDING”, and press **YES**.



5 Press RECORDER, ►PLAY, II PAUSE, and ●REC to set the recorder to recording pause mode.

6 Press YES.

The timing adjustment data are recorded on the tape.



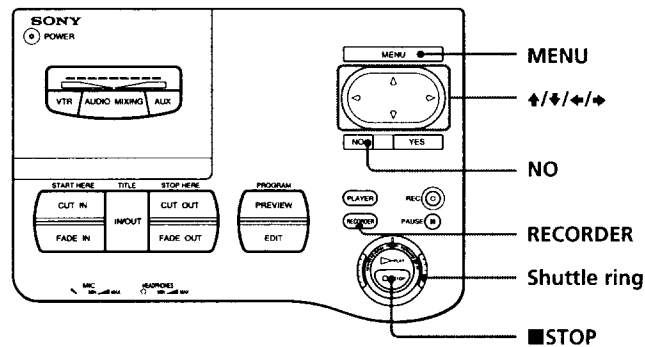
7 Press YES.

To compensate for the lag, start the next procedure.

Compensating for the lag

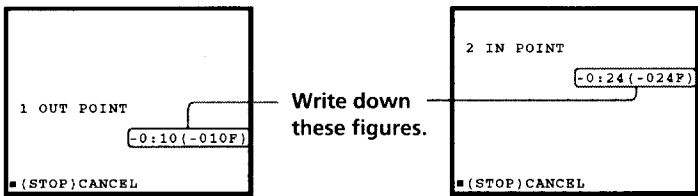
Before starting this operation, prepare a pen or something to write with.

For the shuttle ring functions, see “Using the shuttle ring” (p. 24).

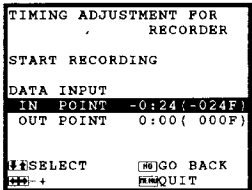


- 1 Press **RECORDER**, and rewind the tape you recorded the timing adjustment data on by turning the shuttle ring to ◀◀.
- 2 Playback the tape by frame-by-frame playback using the shuttle ring, and write down the adjustment values of the **IN POINT** and the **OUT POINT**.

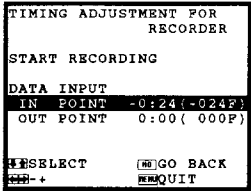
IN POINT : the frame where the recording actually starts
OUT POINT : the frame where the recording actually stops



- 3 Press ■**STOP** to stop the recorder.
- 4 Press ◀/▶ to select “IN POINT”



5 Press **↔** to enter the adjustment figure (the figures you wrote down).
Pressing **→** increases and pressing **←** decreases the digits.



6 Press **↔** to select "OUT POINT", and enter the adjustment figure (the figures you wrote down).

7 Press **NO** go back to the main menu.

When you have finished, press MENU.
The menu disappears.

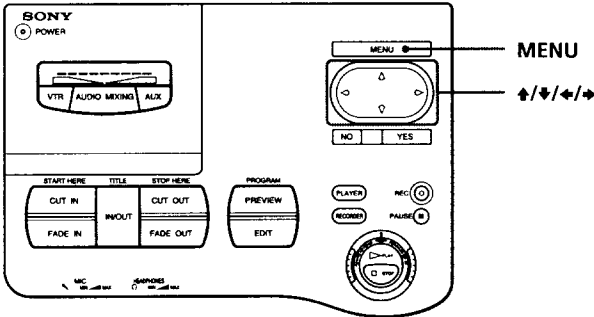
Notes on the recorder

- With some recorders, the lag at the IN point of the first cut of the program is different from that of other cuts.
- With some recorders, the lag at the OUT point of the last cut of the program is different from that of other cuts.
- Perform the timing adjustment again when:
 - you change the recording mode (SP/LP).
 - you change the control connection of the recorder and this unit.
- Accurate compensation is not possible with video equipment that produces noise in the picture during the playback pause mode, or does not have the frame-by-frame playback function.

Setting the options

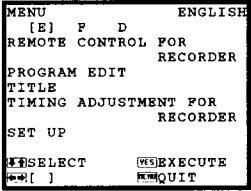
Setting the button sound

You can set a beep to sound or not when you press a button.



1 Press MENU.

The main menu appears.



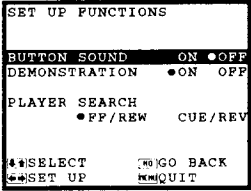
2 Press ↑/↓ to move select “SET UP” and press YES.



3 Press ↑/↓ to select “BUTTON SOUND”, and press ←/→ to move ● to “ON” or “OFF”.

ON : A beep sound when you press a button.

OFF : No beep sounds.



To end setting, press MENU.

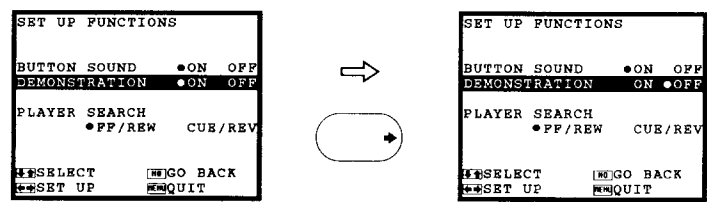
The menu disappears.

Setting the demonstration mode

You can set the demonstration to appear or not when the power is turned on.

In the "SET UP FUNCTIONS" menu, select "DEMONSTRATION" and press **↔** to move ● to "ON" or "OFF".

- ON : Demonstration appears when the power is turned on.
- OFF : No demonstration appears.

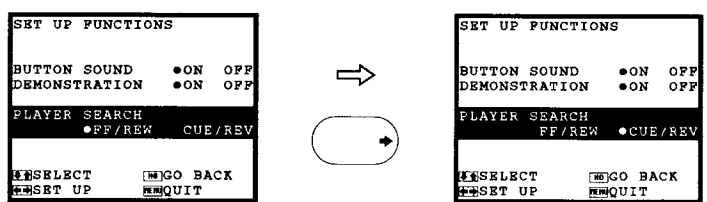


Setting the player search mode

You can set the player's search mode to locate a scene.

In the "SET UP FUNCTIONS" menu, select "PLAYER SEARCH" and press **↔** to move ● to "FF/REW" or "CUE/REV".

- FF/REW : The player locates a scene by fast-forwarding or rewinding.
- CUE/REV : The player locates a scene by fast-forward playback or reverse playback.



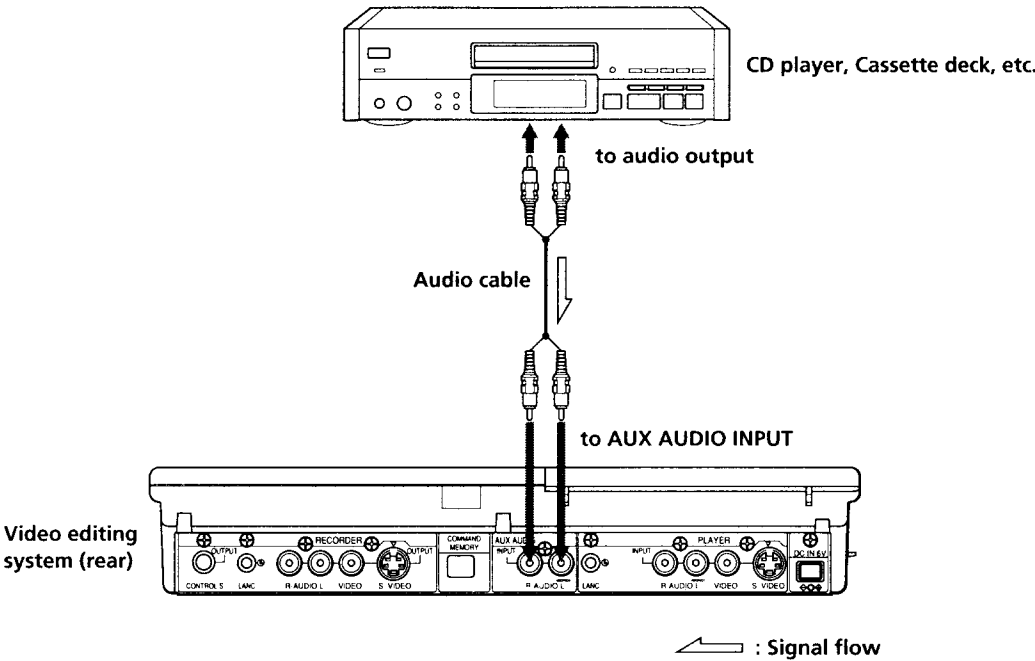
Working with other equipment

Mixing CD or tape sound

While editing, you can mix in sound from connected audio equipment such as a CD player or a cassette deck.

Connecting audio equipment

Connect audio equipment to the AUX AUDIO INPUT jacks of the video editing system.

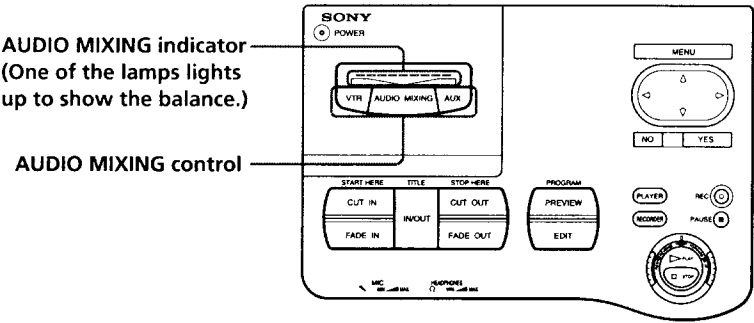


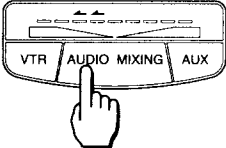
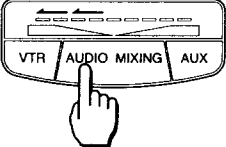
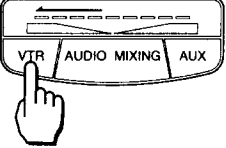
Note

When you connect a monaural player to the AUDIO INPUT jacks, connect only the AUDIO L plug (white). The sound is recorded through left and right AUDIO OUTPUT jacks in monaural.

Adjusting the balance of the sound

You can adjust the balance of the sound between your original videotape and the audio source using the AUDIO MIXING control. The AUDIO MIXING indicator shows the change of the balance.



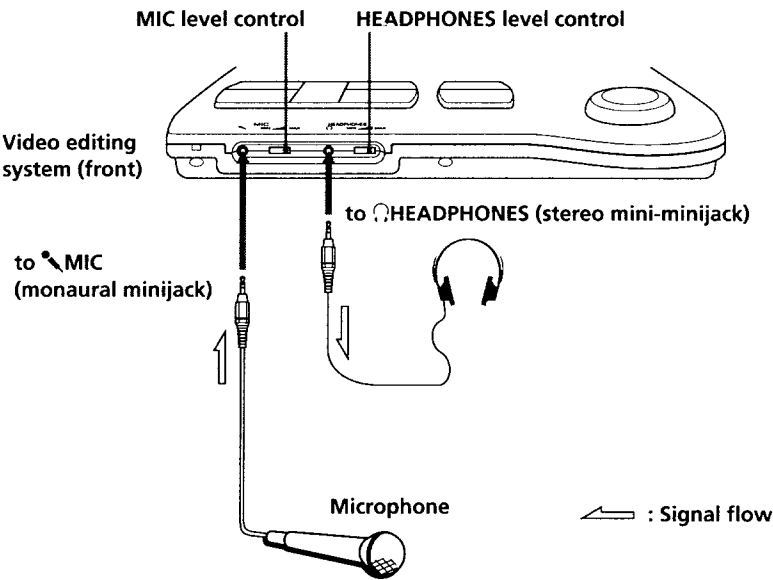
Sound balance	Operation	The indicator
To decrease the CD/tape sound slowly	Keep pressing the left side of AUDIO MIXING slightly.	
To decrease the CD/tape sound rapidly	Keep pressing down the left side of AUDIO MIXING.	
To make only the picture sound be heard instantly	Press VTR.	

To decrease the videotape sound while increasing the CD/ tape sound

Press the right side of AUDIO MIXING or AUX in the same way as above.

Mixing sound from a microphone

While editing, you can add a narration to your videotape and the sound from audio equipment using a microphone (not supplied).
If you want to monitor the sound being mixed, connect headphones (not supplied).



Notes

- The sound from a microphone is recorded in monaural.
- You cannot use a microphone that is an exclusive "plug-in-power" type.
- When you mix sound from a microphone, the AUDIO MIXING control on the video editing system does not function.

Precautions

On safety

- Do not open the cabinet. Refer servicing to qualified personnel only.
- Should any liquid or solid object fall into the cabinet, disconnect the power source and have the unit checked by qualified personnel before operating the unit any further.

On power sources

- The nameplate indicating operating voltage, power consumption, etc., is located on the rear panel of the main unit.
- Operate the unit only on 6 V DC. For AC operation, use only the supplied AC power adaptor.

For European models except the United Kingdom:

AC-E60L

For the United Kingdom models: AC-AL100

For USA/Canadian models: AC-E60L

For other models: AC-MZ60

Do not use any other AC power adaptor as it may cause malfunction.

On installation

- Allow adequate air circulation to prevent internal heat build-up.
- Do not install the unit near heat sources such as a radiator or air duct, or in a place subject to direct sunlight, excessive dust, mechanical vibration, or shock.

On transportation

Do not throw away the carton and packing materials. They make an ideal container in which to transport the unit. When shipping the unit to another location, repack it as illustrated on the carton.

Caution

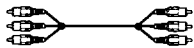
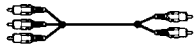
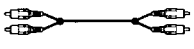
Television programs, films, video tapes and other materials may be copyrighted. Unauthorized recording of such material may be contrary to the provisions of the copyright laws.

Specifications

Input jacks	
Video	PLAYER INPUT S-VIDEO IN: 4-pin mini DIN (1) Luminance 1 Vp-p, 75 ohms, unbalanced, sync negative Chrominance 286 mVp-p, 75 ohms, unbalanced VIDEO IN: Phono jack (1) 1 Vp-p, 75 ohms, unbalanced, sync negative
Audio	PLAYER INPUT (1) AUX AUDIO INPUT (1) Phono jacks -7.5 dBs, impedance 47 kohms or more
Microphone	Minijack (front 1) -60 dBs, 3 kohms or more
Output jacks	
Video	RECORDER OUTPUT S-VIDEO OUT: 4-pin mini DIN (1) Luminance 1 Vp-p, 75 ohms, unbalanced, sync negative VIDEO OUT: Phono jack (1) 1 Vp-p, 75 ohms, unbalanced, sync negative
Audio	RECORDER OUTPUT (1) Phono jacks, -7.5 dBs, impedance 470 ohms or less
LANC	Stereo mini-minijack (2)
CONTROL S	Minijack (1)
Headphones	Stereo mini-minijack (1) 12 mW (47 ohms), appropriate impedance 8 ohms or more

→Specifications

General	
Power requirements	6 V DC IN, connecting the supplied AC power adaptor AC-E60L for European models except the United Kingdom: 220 - 230 V AC, 50/60 Hz AC-AL100 for The United Kingdom models: 230 - 240 V AC, 50 Hz AC-E60L for USA/Canadian models: 120 V AC, 60 Hz AC-MZ60 for other models: 100 - 240 V AC, 50/60 Hz
Power consumption	6 W
Operating temperature	5°C to 35°C (41°F to +95°F)
Storage temperature	-20°C to +60°C (-4°F to +140°F)
Dimensions	Approx. 340 x 66 x 235 mm (w/h/d/) (13 3/8 x 2 3/5 x 9 1/4 inches)
Mass	Approx. 1.05 kg (2 lb. 5 oz.)
Supplied accessories	See page 5.
Design and specifications are subject to change without notice.	

Optional connecting cables			
A/V connecting cable (m/ft)			
VMC-810HG	1/3	Audio : stereo↔stereo	
VMC-815HG	1.5/5		
VMC-820HG	2/7	Phono plug 3↔3	
VMC-830HG	3/10		
VMC-910HG	1/3	Audio : stereo↔monaural	
VMC-915HG	1.5/5		
VMC-920HG	2/7	Phono plug 3↔2	
VMC-930HG	3/10		
S connecting cable (m/ft)			
YC-10V	1/3		
YC-15V	1.5/5	4-pin plug	4-pin plug
YC-30V	3/10		
Video connecting cable (m/ft)			
VMC-10HG	1/3		
VMC-15HG	1.5/5	Phono plug	Phono plug
VMC-20HG	2/7		
VMC-30HG	3/10		
Audio connecting cable (m/ft)			
RK-C510HG	1/3	stereo↔stereo	
RK-C515HG	1.5/5		
RK-C520HG	2/7	Phono plug 2↔2	
RK-C530HG	3/10		

Error Messages

Error number	Message	Cause	Remedy
11	BACK UP BATTERY LOW	The backup battery is weak.	The backup battery is not user-serviceable. Contact your Sony dealer or local authorized Sony service facility. To turn off the message, press YES.
21	• NO RESPONSE FROM VTR PLAYER • NO RESPONSE FROM VTR RECORDER	The unit has stopped program editing because the indicated video equipment does not operate.	Check the connection of the video equipment, or the tape in it. To turn off the message, press YES.
22	• LANC CONNECTION ERROR PLAYER • LANC CONNECTION ERROR RECORDER	The unit has stopped program editing because the indicated video equipment stopped.	Check the status of the video equipment. To turn off the message, press YES.
23	• CANNOT READ COUNTER/TC PLAYER • CANNOT READ COUNTER/TC RECORDER	The unit cannot read the counter of the indicated video equipment.	Check the connection of the video equipment, or the tape in it. To turn off the message, press YES.
31	INCOMPATIBLE COUNTER/TC PLAYER	The unit has stopped program editing because the indicated player's counter is different from that of the program.	Change the counter to that of the program (p.33) To turn off the message, press YES.
32	• COUNTER/TC TYPE NOT CONSISTENT PLAYER • COUNTER/TC TYPE NOT CONSISTENT RECORDER	There are different counters in the program.	Change the counter of the player and revise the program. To turn off the message, press YES.
41	• LANC CONNECTION ERROR PLAYER • LANC CONNECTION ERROR RECORDER	The unit has stopped program editing because it cannot control the indicated video equipment.	• Check the connection. • Turn on the power of the indicated video equipment. • Set the recorder control system (p. 14). To turn off the message, press YES.
52	CANNOT COPY	You cannot copy the cut because the 20th cut position is occupied.	Move or delete the 20th cut (p. 41). To turn off the message, press YES.
71	REMOTE CONTROL MEMORY FULL	There is not enough memory for learning the commander.	• To learn again from the beginning, press YES (p. 20). • To finish learning at that time, press NO.
72	LEARNING ERROR	The unit failed to learn the commander.	Try again from the beginning (p. 20). To turn off the message, press YES.
101	CANNOT INSERT	You cannot insert a line on the title screen because the 12th line position is occupied.	Delete the 12th line (p. 46). To turn off the message, press YES.
102	CANNOT COPY	You cannot copy the title because the 15th cut position is occupied.	Move or delete the 15th title (pp. 48-49). To turn off the message, press YES.
103	CANNOT CHANGE SIZE	You cannot select the large title because the 12th line position is occupied.	Delete the 12th line (p. 46). To turn off the message, press YES.

Troubleshooting

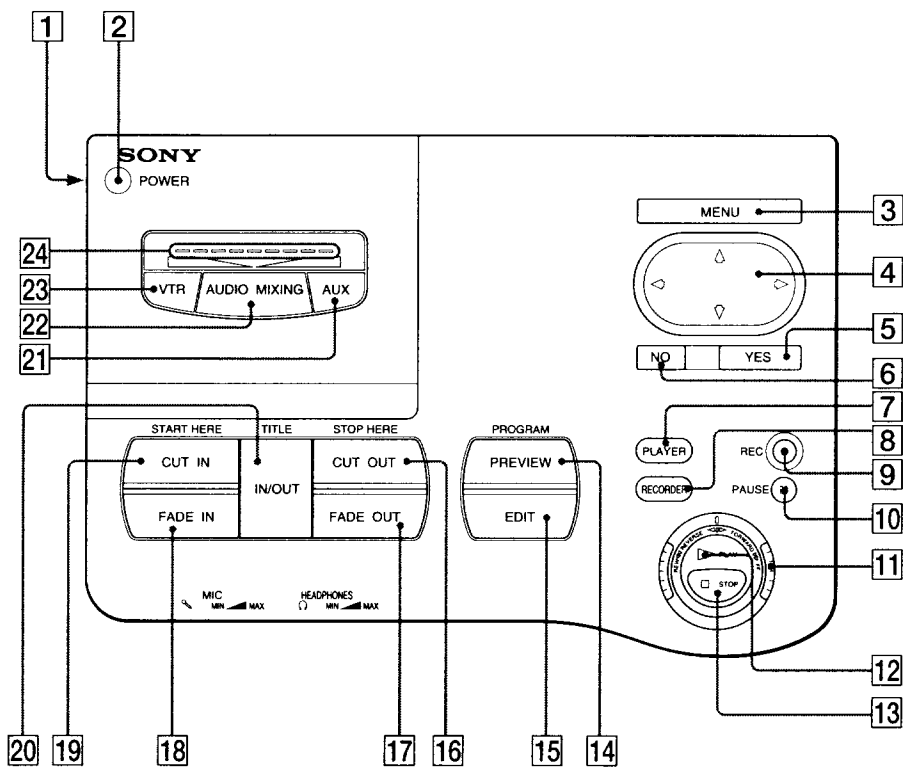
If you have a problem, go through the operating instructions and the following list. If the problem is not included in the list, unplug the unit and contact your Sony dealer or local authorized Sony service facility.

Symptom	Cause and remedy
Even though you pressed POWER ON, the unit does not turn on. (The POWER indicator does not light up.)	Connect the power cord.
No playback picture appears.	• Turn on the power of the player. • The tape of the player is at the end. • If you use a video camera recorder for the player, set the input/output selector of the video/audio jacks to output. • If you use a video camera recorder for the player, set the POWER switch to VTR or PLAYER. • Turn on the monitor.
The recorder's counter does not appear.	This unit does not indicate the recorder's counter. Check the counter on the recorder itself.
You cannot operate the recorder.	• Turn on the power of the recorder. • Press RECORDER. • No tape in the recorder. • Check the connection between the main unit and the recorder. • The command mode or control signal of the recorder is not set or stored correctly (p. 14).
Program editing does not start.	• The recorder is not set to pause mode. Make sure that you set the recorder to recording pause mode to execute the program editing (p. 38). • No tape in the recorder. • The tape in the recorder is at the end. • The safety tab of the tape is set to prevent recording. • The tape of the recorder is rewound to the beginning. Program editing is not possible within 15 seconds from the beginning of the tape (about 15 counts for the 4-digit counter). • The remote sensors of the recorder and the player are in the same VTR mode, or the VTR mode switch of the recorder is set to the wrong mode. • If you use a video camera recorder for the recorder, set the POWER switch to VTR or PLAYER. • The operation system of the recorder is not set correctly (p. 14). • The sound volume is low.
The picture is blackish.	The picture or sound has been faded out. When you do not want to fade the picture and sound, press CUT IN or CUT OUT while executing real-time editing. If you have edited with program editing, revise the program (p. 39).
You cannot operate the recorder with the infrared remote control signal.	• Check if the remote control sensor of the recorder is facing toward the signal emitter of the unit. • The VTR mode is not set correctly (p. 17).
The menu display does not appear in color.	With some types of player the menu display does not appear in color while it is in the stop mode. When the player starts playback, color will appear on the menu display.

Parts identification

For use of each control, see the pages indicated in the parentheses.

Video editing system



General

- 1 POWER ON/OFF switch (15, 26)
- 2 POWER indicator (15, 26)

Menu operation

- 3 MENU button (15)
- 4 $\uparrow/\downarrow/\leftarrow/\rightarrow$ button (15, 16)
- 5 YES button (16)
- 6 NO button (27)

Player and recorder operation

- 7 PLAYER button (22)
- 8 RECORDER button (22)
- 9 REC button (22)
- 10 PAUSE button (22)
- 11 Shuttle ring (24)
- 12 $\blacktriangleright$ PLAY button (24)
- 13 $\blacksquare$ STOP button (24)

Program edit operation

- 14 PROGRAM PREVIEW button (37)
- 15 PROGRAM EDIT button (38)

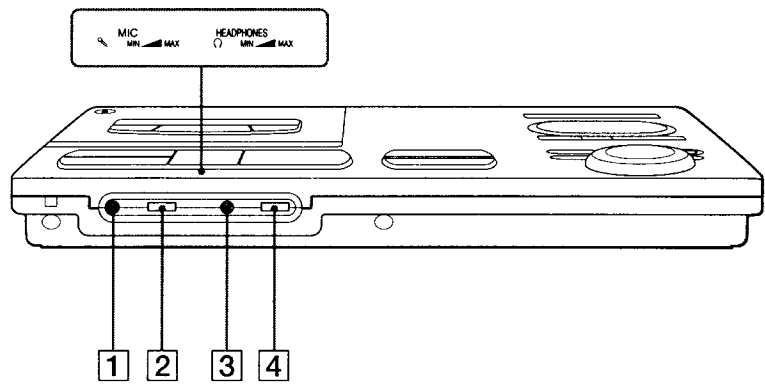
Real time edit operation

- 16 STOP HERE CUT OUT button (30, 39)
- 17 STOP HERE FADE OUT button (30, 39)
- 18 START HERE FADE IN button (30, 39)
- 19 START HERE CUT IN button (30, 39)
- 20 TITLE IN/OUT button (30)

Audio mixing operation

- 21 AUX (auxiliary) button (61)
- 22 AUDIO MIXING button (61)
- 23 VTR button (61)
- 24 Audio mixing indicator (61)

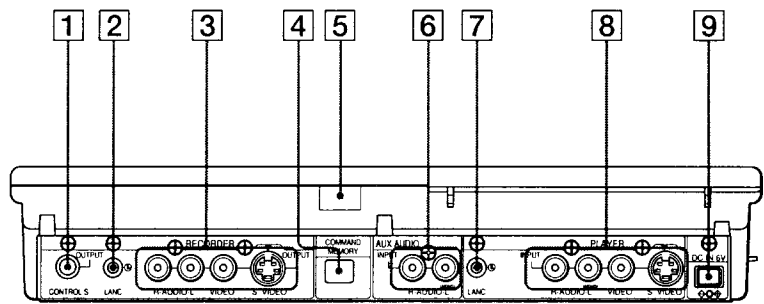
Front panel



Headphones and microphone

- 1 MIC (microphone) jack (62)
- 2 MIC (microphone) level control (62)
- 3 HEADPHONES jack (62)
- 4 HEADPHONES level control (62)

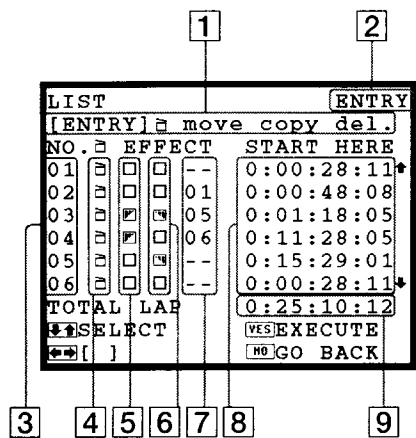
Rear panel



- 1 CONTROL S OUTPUT jack (11)
- 2 RECORDER LANC jack (10)
- 3 RECORDER OUTPUT jacks (10, 11, 12)
- 4 COMMAND MEMORY sensor (20)
- 5 Signal emitter (12, 22)
- 6 AUX (auxiliary) AUDIO INPUT jacks (60)
- 7 LANC jack (8)
- 8 PLAYER INPUT jacks (8)
- 9 DC IN 6 V jack (13)

Edit list

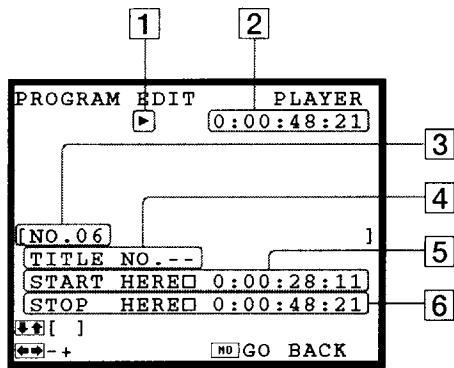
Turn on the power, select “PROGRAM EDIT”, and press YES. The edit list appears. (p. 34, p. 39)



- 1 Mode list
- 2 Mode indication
- 3 Cut number
- 4 Execution icon
 - ☐ : The cut is included in the program.
 - ☒ : The cut is excluded from the program.
- 5 IN point effect icon
 - ☐ : CUT IN
 - ☑ : FADE IN
- 6 OUT point effect icon
 - ☐ : CUT OUT
 - ☑ : FADE OUT
- 7 Title number
- 8 START HERE point
- 9 Total lap

Entry mode display

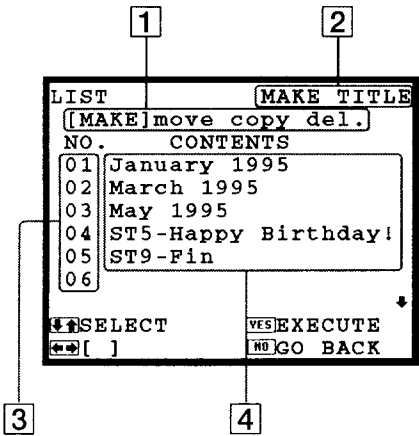
On the edit list, select “ENTRY” and press YES. The entry mode display appears. (p. 35, p. 39)



- 1 Tape transport mode of the player/recorder
- 2 Current counter of the player/recorder
- 3 Cut number
- 4 Title number
- 5 START HERE point with the effect icon
- 6 STOP HERE point with the effect icon

Title list

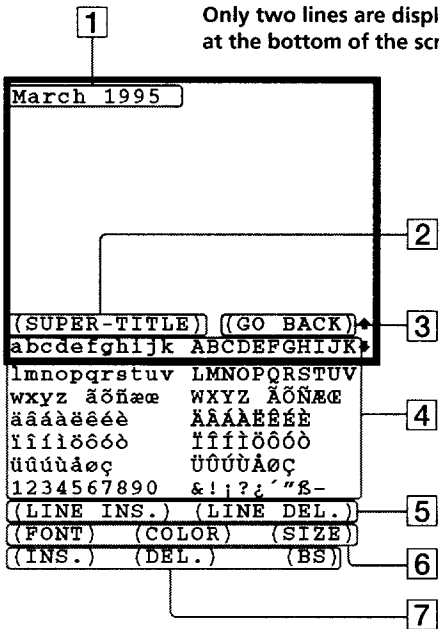
On the main menu, select “TITLE” and press YES. The title list appears. (p. 27, p. 44, p. 48)



- 1 Mode list
- 2 Mode indication
- 3 Title number
- 4 Contents of titles

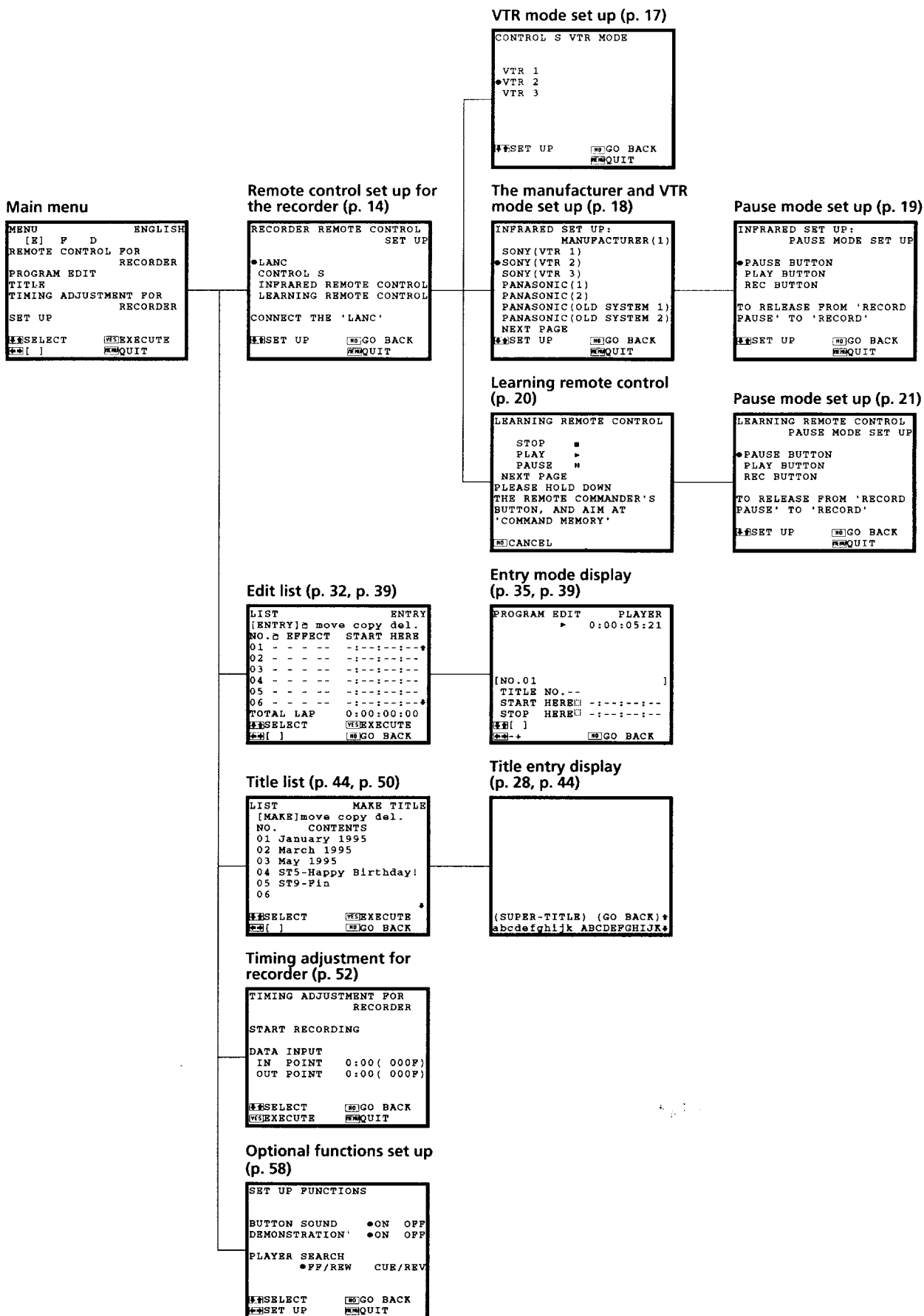
Title entry display

On the file list, select “MAKE” and the title number. The title entry display appears. (p. 28, p. 44)



- 1 The title being entered
- 2 SUPER-TITLE mode indication (28)
- 3 GO BACK mode indication
- 4 Character list (46)
- 5 LINE INS (insert)/LINE DEL (delete) indications (46)
- 6 FONT/COLOR/SIZE indications (47)
- 7 Character INS (insert)/DEL (delete)/BS (back space) indications (46)

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